

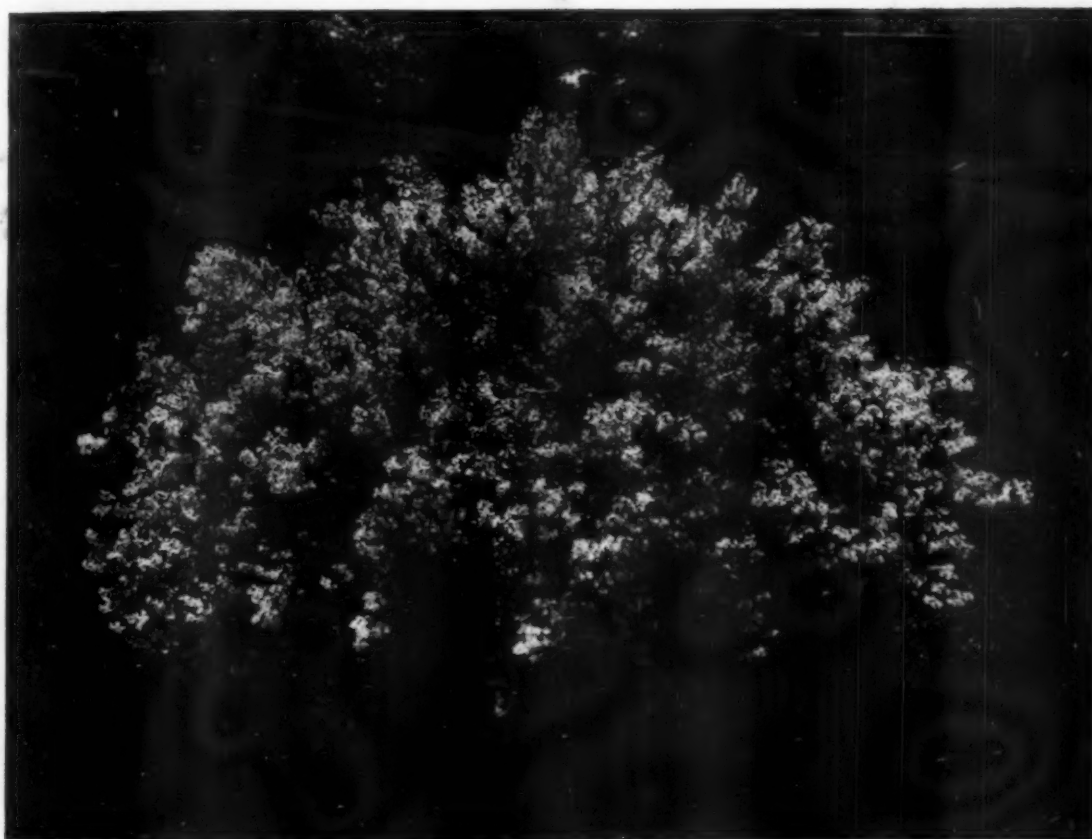
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# AMERICAN NURSERYMAN

and The NATIONAL NURSERYMAN

DECEMBER 15, 1939 .



*Deutzia Gracilis*

More on New Perennials

Identifying Woody Plants in Winter

Tropical Shrubs from Leaf-bud Cuttings

Excerpts from a Plantsman's Notebook

# AMERICAN NURSERYMAN

and The NATIONAL NURSERYMAN

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## MERRY CHRISTMAS!

Approaching the holiday season, reflection on the progress of this publication in the few years since the depression brings warm cheer. Never before has the American Nurseryman had so many readers, and this is in a substantial measure due to friends here and there throughout the country who lent their support and help in various ways. Then because of the response of these subscribers, the number of advertisers has reached a high point. While not so many use the large spaces they did in the good old roaring twenties, that's to be expected in these days when no one can be a generous spender but the government. The editorial columns reflect the voluntary enlistment of nurserymen to make their own trade paper one of more help and value to them. As the mirror of the industry, this magazine reflects what good fellows and warm friends nurserymen are.

They too can look back upon decided progress in recent years, for reports from every section indicate that the current season is the best for a considerable while. The outlook is propitious, moreover, not in the sense that a boom is on the way, but rather that business in general is on a firm footing, no longer subject to slipping and missteps, but ready to go forward with better confidence.

While there are troubles enough here and abroad, there is firmer conviction that the sound laws of nature will prevail and what seems right will

persist, so that in this coming yuletide season we all have reason to repeat as a sincere wish, as we do, Merry Christmas!

## ANNUAL INDEX.

In this concluding issue of the year is presented an index to the reading contents of the twenty-four issues published during 1939, to meet the requests of a number of readers. So that they will find it of easy reference for the items in which they are interested, listing is limited to plant notes, association annual meetings at which elections or other important business occurs, and articles that hold information of more or less permanent value. Obviously, short items and news reports have not been included. For brevity, plants are listed under genera except where only one species was discussed.

In other words, the annual index has been compiled so as to be helpful, rather than inclusive. If readers wish to criticize any omissions or to make any suggestions as to improvements, they will be welcomed as a guide for next year.

## DEUTZIA GRACILIS.

The deciduous shrubs are often classified as flowering or foliage shrubs. From the standpoint of their effectiveness in the landscape picture over a longer period, there is little doubt that the foliage shrubs are the more important. Of course, as far as possible we should attempt to choose the foliage shrubs that also possess good flowers, good fruit and good growth habit. There are situations in the landscape picture where one is able to use a good flowering shrub even though the foliage may not be especially good. *Deutzia gracilis* is a plant of this type.

The slender *deutzia*, a native of Japan, is often considered as one of the best of the low-growing flowering shrubs. Usually not much more than three feet in height, the branches are slender and relatively upright, although those near the base of the plant are often arching to some extent.

The foliage is of medium size, light or grayish-green, produced in

## The Mirror of the Trade

opposite arrangement on yellowish-gray stems. The white flowers are produced freely in upright clusters in early to mid-May. The fruit is not important from an ornamental standpoint.

*Deutzia gracilis* is not entirely hardy, some injury often occurring in cold winters. Because of this factor, the lighter soils which tend to bring about earlier maturity and greater hardiness are preferred. Neutral or alkaline soils are best for satisfactory growth. In the warmer summer climates they may be given a little shade; otherwise a full sunny exposure is best. Since individual stems of the slender *deutzia* are not long-lived, frequent pruning to remove the older stems at the ground level is required. Propagation is by softwood cuttings, which root easily, or by division of large clumps.

The best use of this shrub in landscape plantings is for facing larger shrubs in a border planting. Use it in masses and, where possible, in front of shrubs which produce their foliage early in the spring so that a background is provided for the flowers of the *deutzia*. L. C. C.

## THANKS TO FRIENDS.

Reasons for a record month for new subscriptions in November included the recommendations of old subscribers. It was noteworthy that several nurserymen who sent in initial subscription remittances reported the name of the subscriber who had told him about this magazine. Others probably could be credited to the same cause though no mention was made of the responsible person.

No success is equal to that of making friends, and this manifestation of our readers' sentiments is highly encouraging. It makes the offer of thanks too faint a response.

For an expression of Christmas cheer to a nurseryman who is your neighbor, we might suggest an invitation that he subscribe, as helpful to him, to old readers and to us, for the wider the circle the greater the interchange of helpful information.

A NURSERY at Rose and Hiatt streets, Lebanon, Ore., is being started by George Surrey and Leslie Fowler.

# AMERICAN NURSERYMAN

[Registered U. S. Patent Office]

*The Nurseryman's Forte: To Make America More Beautiful and Fruitful*

DECEMBER 15, 1939

## More on New Perennials

*Article in Previous Issue Impels Further Comments on Plants Discussed and on Additional Subjects of Merit for Commercial Growers—By Fred J. Borsch*

After reading George E. Rose's article on "New Perennial Varieties of Interest" in the November 15 issue of the American Nurseryman, I will say that it is one of the best that I have read since Hector was a pup. If there were only some way in which we could get those growers to sell perennials for the prices he mentions—5, 3 and even 2 cents each wholesale, and 15 and 10 cents retail, to read that article!

I agree with Mr. Rose's statement regarding the importance of being in on the ground floor when worthwhile new introductions are offered. This means taking chances, for not every new introduction is worth while. On the contrary, less than fifty per cent are even worth growing. But in order to be one of the first to offer them to the public, it is necessary to take these chances.

We import new varieties of perennials and alpine each year, both from Japan and Europe, and have learned one lesson which we shall not forget—not to take the other fellow's word for either description or desirability, unless you are personally acquainted with that person and know that he is reliable.

I am growing most of the items Mr. Rose mentioned and will not argue with him about their respective merits, but should like to give my impressions of a few additional good sellers.

Before going into that phase, I should like to give my experiences in growing a few of the items he mentions.

*Aethionema* Warley Rose is a deep-rooting plant and rather difficult to move from the field when in bloom. And that is the time it sells best. It is true that you can grow it in pots, but you do not get

the good plants produced if grown in the field for a season. We grow all of ours in pots and set them out in June or July. In September we take up a small block of them, shear back the roots and replant. In spring we can take them up while in full bloom and move them without danger of customers' losing the plants. They are worth the 50 cents each that they sell for at retail.

I have had *Geum Gladys Perry* for several years and found it a desirable plant on account of its dwarf, compact habit. It is a slow starter, but permanent when once established.

*Aster novi-belgii Violetta*, in our humble opinion, is the best of the blues, or violet-blues. The foliage and stems are quite dark, with the flowers extending from the very base of the plant to the tops.

*Aubrietias* are probably the most popular plants in our gardens when in bloom. While they are easy to

move while in full bloom, many gardeners like to plant them either in fall or early spring, before they bloom. In order to be sure of the color of the flower, you must have named varieties propagated vegetatively. We grow several thousand seedlings each year, reserving until they bloom and keeping for stock the very best, for propagating. Customers do not mind paying 50 cents for a good clump of *aubrietia* if the color suits them. If your stock is low on a particular variety, just take their orders and deliver later when you have increased your stock.

Some varieties are more difficult to propagate than others. The varieties *Gloriosa*, rose-pink; *Carnival*, deep violet, and *Vindictive*, rich red, do not strike as readily from cuttings as others. And they are some of the most popular. Other popular varieties are Borsch's *Brilliant*, glowing crimson-red flowers; *Catherine M.*, a light shade of pink; *Dr. Mules*, violet-purple; *Violet Gem*, and *Waight's Red Gem*, the last of compact habit, with small bright red flowers.

*Campanula persicifolia* Summer Skies has cup-and-saucer flowers of pale blue, on wiry stalks from two to three feet high. It is becoming popular and should be a good seller for several years.

*Dianthus Little Joe* was picked out of a lot of a thousand seedlings and tested for three years. It has a dwarf, compact habit, grayish foliage which stays clean throughout the year and bright crimson flowers on 6-inch to 8-inch stems from May to October.

*Delphinium cinereum* has strikingly brilliant blue flowers on 12-inch to 15-inch stems from early spring until late fall. Do not let them set seeds and they will continue to flower all

Terming the article on perennials in the November 15 issue, by George E. Rose, "the best of its kind that I have ever read," Fred J. Borsch took time off—"busy as I am at this time of the year," he says—from directing the shipment of alpine and perennials by William Borsch & Son, Inc., Maplewood, Ore., to present his comments on some of the subjects mentioned and to add notes on other perennials.

Other readers' comments indicate that these first-hand reports of growers' experiences are of prime value, and more will be welcome.

George E. Rose, who started the discussion a month ago, formerly with Barnes Bros. Nursery Co., is now superintendent of the new branch nurseries at Ipswich, Mass., of the firm of Corliss Bros., Inc., Gloucester, Mass.



summer. This is a true perennial, unlike *D. chinense*. It is easy to move while in full bloom.

*Gentiana acaulis* Clusii is, for those who can make it happy, a sure seller. It will grow in our gardens in almost any kind of soil, except under walnut trees where the soil is loose and the shade heavy. It requires root moisture in summer and a firm rooting. It has large gentian-blue trumpets on 6-inch stems in early spring.

Geum Waight's Brilliant was picked up as a seedling in a small grower's nursery several years ago and will be listed for the first time in 1940. It came from seeds gathered from *Geum aurantiacum*, which was growing with *Geum Borisii*. It has the compact habit of *Geum aurantiacum* and the foliage and flowers of *Borisii*, perhaps a little brighter. It will bloom from early spring until late summer and again in fall. The large flowers come on 4-inch to 6-inch stems. It requires a little shade, doing well with *Geum montanum*.

Of *Helleborus niger altifolius*, the Christmas rose, for years we bought seeds by the pound, but never had more than two or three per cent of the seeds germinate. We imported a good strain of this plant and finally collected our own seeds, which seem to produce two plants for every seed sown! We grow them in flats for one season, setting out in beds and cold-frames in May, the plants being one year old then. They will bloom at the end of the second year if allowed to do so, but we cut off the flowers as they open, unless plants are sold. The third year they really give some blooms, and a good 4 or 5-year-old clump, which has not been disturbed for several years, will produce from forty to sixty good flowers, anywhere from early December to mid-January. The plants are absolutely hardy, but require some shade during July and August, when they form their flower buds in the crown. They should have some water at that time. Give rich, deep soil. This variety gives wonderful cut flowers, lasting seven to ten days in water.

*Hemerocallis fulva rosea* is much sought for by hybridizers and is still scarce in this country as well as in Europe, being among the highest-priced of the genus listed. It has rather narrow petals, fulvous-rose, with red zone and yellow-shaded base.

*Jeffersonia dubia* is from Manchuria and quite hardy if protected from burning winds. In shade or light shade, in light woodland soil, it will produce its rounded, scalloped, glaucous leaves of metallic dim-violet tone on 6-inch stems and large hepatic-like flowers of an attractive shade of blue in May and June. The plants bring \$1 each and large clumps more. It is propagated by divisions or seeds.

*Kniphofia alooides maxima* is an outstanding tritoma with dark olive-green foliage and rigid stems terminating with bold spikes of brilliant orange-scarlet flowers from July to October, from seven to eight feet high.

*Kniphofia erecta* is a rare species, with close spikes of fiery orange-scarlet flowers, which stand erect instead of drooping or nodding as in other kniphofias. It grows up to five feet and flowers from July to October.

*Primula Sieboldii* hybrids are probably the most satisfactory primulas for the midwest, where winters are cold and summers still harder on perennials. They produce masses of soft crumpled leaves, which are scalloped and appear in early spring (they begin to appear with us in December and January, if the winter is not too severe). Large flowers in heads are carried on 12-inch stems. The color ranges from pure white, through shades of pink and lavender, in almost every conceivable design of fringing segment. The plants are propagated by divisions in September or October.

The hybrids of *Primula Juliae* will be good sellers for many years as gardeners begin to learn what they require to make them thrive—a moist loam, with shade during summer. They soon form spreading mats by their creeping rhizomes. Some of the newer and more popular varieties are Springtime, lavender-pink; Dorothy, pale primrose-yellow; Wanda, deep purplish-blue; Vulcan, reddish; Pam, maroon-red.

*Ranunculus montanus* makes neat clumps of bright green foliage and large golden buttercups on 6-inch stems in May and June and again in the fall. It prefers a light shade in woodland soil. It is propagated by division in summer or early spring.

*Thalictrum kiusianum* is a creeping species, the new growths dropping roots three to four inches from the parent plant, which throw up 6-inch stems crowded with lilac and pink flowers all summer. These in turn send out

other runners, and the flowering period extends over a long time. It requires good loam with peat or leaf mold and water during the summer months, as it is very shallow-rooting. It must have shade and a little protection during the winter in cold climates. It propagates by division, as we have not seen seeds on any of our plants. It is a native of Japan.

In veronicas I think *V. armena* is one of the outstanding species. Of trailing habit, with fine-cut foliage, it produces its sky-blue flowers all summer. It is never over three inches high. It is propagated from divisions. I quite agree with Mr. Rose regarding *hemerocallises*, irises and peonies—leave them to the specialists.

We have been specializing in *Phlox paniculata* (decussata) for many years and agree with Mr. Rose about the bewildering number of varieties listed now, with many more coming along. And the descriptions are certainly conflicting. There are a few reliable growers who make an earnest effort to keep their stocks both straight and clean, but in spite of all efforts, most of us will stumble once in a while.

I do not know why *Gaillardia* Mr. Sherbrook does not do well with us. We have given it the same treatment as *G. Sun God*, but it is usually good for only one season, the first. We set out young plants in May or June, and by September they are in full bloom. We cut them back in mid-October, so that they will make better roots and also develop new crown for the following spring. *Sun God* responds to this, even in our wettest or coldest winters, but Mr. Sherbrook seldom makes a good plant the following year.

In the colored *gaillardias*, *Portola* is still our best seller. It is a good color, a rich crimson, barely tipped yellow, and the petals are somewhat doubled and fluted, growing on strong, stiff stems. It resents a rich soil and too much water in summer. Propagation is from root cuttings.

FIRST-YEAR results of release studies being carried on by the central states forest experiment station, Columbus, O., in cooperation with the Mark Twain and the Clark national forests, are presented in station notes 37, six mimeographed pages, entitled "Some Effects of Release on Planted Shortleaf Pine in the Missouri Ozarks."



# Identifying Woody Plants in Winter

*Third in a Series of Articles on the Structural Marks and Characteristics of Trees and Shrubs Discusses Special Forms of Buds—By Leon Croizat, of the Arnold Arboretum*

In my two preceding articles I have briefly reviewed some of the main aspects of the nature and origin of the bud. The bud, I have stated, is roughly to be understood as a much-crowded whorl of thickened leaves, entire or reduced, which have for their function to protect an inner vegetative core during a time of wintering. The bud scales, we have seen, are either leaflets "cured" and used as a means of protection of the core of the bud (leafy buds) or footstalks that serve the same purpose (scaly buds). In addition, I have emphasized the difference between flower buds and leaf buds; the former contain blossoms that are borne upon very short, generally specialized spurs or twigs; the latter, normal growth with leaves that in due time bears flowers.

Before describing in detail the bud of various cultivated plants and shrubs, I wish to bring before the reader's attention some peculiar structure related with buds that occurs in plants of horticultural importance, such as the magnolias. Something also must be said of dormant and adventitious buds, not necessarily because these buds are important for winter determination, but because these buds are mentioned by reference books that horticulturists and nurserymen currently use.

In nine cases out of ten, dormant and adventitious buds are confused together. Even as their name implies, however, these buds are different structures, although they often serve the same purpose. A dormant bud is a bud that "sleeps" (from the Latin verb *dormire*, to sleep) and wakes up, or slumbers on, depending upon outside circumstances. An adventitious bud is a bud that "comes on" (from the Latin word *adventus*, arrival), not seldom unheralded, and sprouts where normally no bud should or would be.

Let us make the case as clear as possible, and learn once and forever how to tell dormant and adventitious buds apart. Let us look at the twig of an elm—English, Dutch, Scotch or American as this elm may chance to be. We shall find on this twig, preferably toward the tip, well

formed flower buds and leaf buds. Close to the beginning of the past spring's growth, however, we shall see two or three buds that are less well developed. These are, or tend to be, dormant buds. It is only when the tip of the twig is broken or injured that these buds come to life, furnishing the required surrogate growth. Dormant buds may linger on for years—how long it would be difficult to say—but ultimately tend to die out.

An adventitious bud behaves in a different manner. Uncounted numbers of adventitious buds have been called into being by the hurricane that so severely hit New England in the fall of 1938. Stumps of ashes, sassafras, red maples, horse chestnuts, pears, apples, etc., left to die a natural death after the trunks were sawed off, are now in most cases overgrown with suckers. Some of these suckers grew upon roots that were exposed out of the ground, others at various points of the trunk or of the main branches and some—which is interesting—right from the cambium, coming to light directly between the bark and the wood. It is clear that all these buds, and those which grew from the cambium particularly, are adventitious buds; that is to say, buds that "came on" and were not in existence when the trees were uprooted in 1938.

A peculiar aspect of plant life which in some manner is related with the process that produces adventitious buds is that of "proliferation." Double-flowered plums, cherries and, generally speaking, rosaceous woody trees and shrubs often have flowers or parts of flowers that, like grafts, grow upon or from the normal flower. The case of pears that send out a branchlet from the core of their fruits is well known. The layer that overlies the inside of the hip of roses, too, sometimes behaves like the cambium of an uprooted tree.

Dormant and adventitious buds are scarcely important in horticultural practice. They may sometimes be useful as a source of new wood in trees having historical or sentimental value which have been despoiled

by accidents of weather or vandalism. It should be noticed, however, that the production of dormant and adventitious buds, of the latter especially, closely depends upon the vigor and health of the tree. Thus, the rebuilding of a damaged specimen by careful surgery is not nearly so simple a job as it sounds. It is not too difficult when the subject is young or in its full vigor. It is a difficult and complex undertaking, requiring, among other things, extended and methodical preliminary feeding, when the plant to be rebuilt is old or lagging. This is about all I can say about dormant and adventitious buds and their practical use, without entering a discussion that is outside my present field of interest.

Twigs of magnolia and liriodendron are peculiar in at least one respect. They are ringed all around by a thin line which begins on a level with, or just below, the leaf scar. The same is true of the twigs of magnoliaceous trees and shrubs in general and, mostly, of figs and sycamores.

This line has the same origin and nature as the dots or tiny slashes that in other plants—elms and lindens, for instance—stand at the side of the petiole and of the leaf scar. All these marks and scars are left by the so-called stipules. The stipules are important enough to deserve our attention for the rest of this article. Anyone who has had reason to consult horticultural textbooks knows that in every case a plant is listed therein either as "stipulate" or "estipulate."

Scientists, as usual, are far from being agreed as to the origin of stipules. Without entering the arena wherein are fought learned arguments, I shall give the reader some information which, I am sure, will help him to form his own opinion of the origin and nature of the stipules.

*Rosa rugosa* is one of the sturdiest and most frequently planted of flowering shrubs because it stands all kinds of weather and thrives in poor sandy soil. Like other roses, *Rosa rugosa* has a pinnately compound

leaf; that is to say, a leaf that is compound of a number of loose leaflets which are arranged in a double row alongside a central stem (pinna in Latin means a feather, the adjective "pinnately compound" meaning, literally, done up like a feather). On the branches that are about to flower

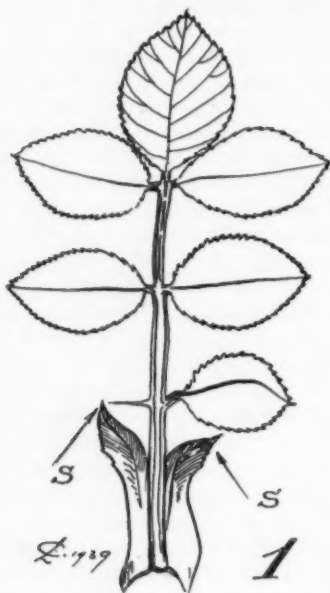


Fig. 1—A normal leaf of *Rosa rugosa*. Notice the stipules (S) shown by arrows.

the normal pinnately compound leaf of *Rosa rugosa* undergoes a change. The base of the leaf where are the stipules (these look like a pair of ears or spurs) tends to become larger all the while the leaflets become fewer. Immediately under the flower the leaf ends by having no leaflets at all, and its base has grown so as to form a very special type of leaf, unlike the ordinary leaf of *Rosa rugosa*, which botanists call a bract. To illustrate what happens I have drawn two sketches: No. 1 shows a leaf that is still normal; that is to say, which has begun to lose some of its leaflets, but can be recognized as yet as a leaf of the kind that is usual for *Rosa rugosa*. Sketch No. 2 shows the bract almost fully formed, the tip leaflet barely appearing as a prominence between the two much-enlarged stipules.

Let us now suppose that we see this process worked backward; that is to say, that we start with the bract shown in figure 2 and end with the leaf shown in figure 1. We can say that we have under the eye a

record of growth showing how one kind of leaf (bract) eventually becomes another kind of leaf (usual leaf). It is evident that the stipules are but a part of the bract that has been left behind, as it were, when the bract gave birth to the usual type of leaf. We may suppose, which is perfectly sensible, that in epochs far gone *Rosa rugosa* had leaves that were all like bracts and that, through evolution, these leaves gradually became pinnately compound. The stipules, consequently, are relics or throwbacks like the appendix and, mostly, the pineal gland in man. The stipules bear witness to a state of affairs that prevailed a long, long time ago. It is not surprising that in many plants the stipules have disappeared altogether or show up irregularly, as they do in *exochorda*, for instance.

There are many indications to the effect that stipules play an important part in the formation of certain types of buds. In no cases, however, is the stipule so important, speaking of cultivated trees and shrubs, as it is in magnolias and in magnoliaceous plants generally. In figure 3 is illustrated a bud of *Magnolia Soulangeana*. The bud scales are two large stipules that clasp the twig all around and at their fall leave behind the

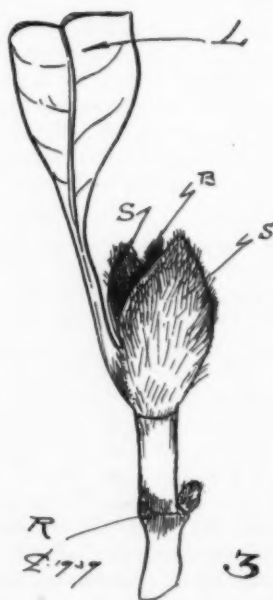


Fig. 3—A bud of *Magnolia Soulangeana*. Notice the bud scales (S) and compare them with the stipules shown in figures 1 and 2. In R is shown the "ring" left by a fallen bud scale and in B the inner bud. The leaf, L, has been cut off.

thin line which is characteristic of the plants in which the bud is of stipular nature, like magnolias, sycamores and figs.

Thus, at the conclusion of this article, we add to our store of knowl-

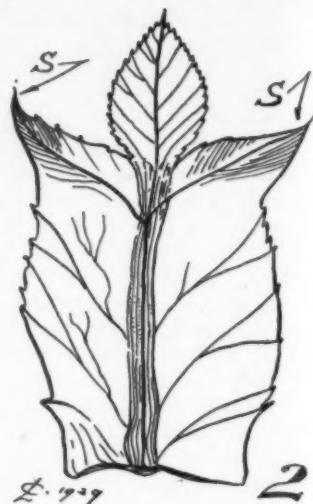


Fig. 2—A bract (specialized leaf located under the flowers) of *Rosa rugosa*, with the beginning of a normal leaf, showing as a leaflet that grows out of the tip of the bract. Notice the stipules (S) shown by arrows, much larger than in Fig. 1.

edge three more kinds of buds, as follows:

(a) Dormant buds. These are buds that "sleep," mostly at the beginning of the year's growth, and wake up when they are needed to rebuild the branch.

(b) Adventitious buds. These are buds that "show up" where no bud should be and are responsible in almost every case for the suckers overgrowing the trunk of fallen or sawed-off trees.

(c) Stipular buds. These are buds the outer scales of which are stipules. The magnolia's are typical stipular buds.

VISITING his nurseries in North Carolina and West Virginia this month, Frank S. LaBar, Stroudsburg, Pa., had with him as guests Charles Hess, Mountain View, N. J., and Paul Hoverman, Paramus, N. J.

J. FRANK SNEED, of the Sneed Nursery Co., Oklahoma City, Okla., underwent an operation for acute appendicitis November 28 at the Polyclinic hospital there. He is reported to be recuperating rapidly and will be able to return to his office within ten days or two weeks.

# Excerpts from a Plantsman's Notebook

*Further Notes on the Culture, Propagation and Uses of Many Kinds of Plants Given Garden Trial in Years Past—By C. W. Wood*

## **Veronica Incana.**

(July 7, 1928.) Few plants of my acquaintance are better fitted to fill the large number of roles of which *Veronica incana* is capable. One often sees it used singly or in small clumps in borders and occasionally in rock gardens, though practitioners of the latter art seem to think that its height of a foot or more, perhaps eighteen inches in robust forms, is too lofty for their work. That, to my way of thinking, is not the way to use the plant to get the most out of its many good qualities. First of all, it is, because of its pleasing mat of white-hoary leaves, a plant to be used lavishly. In the borders it is one thing that can be used in large masses to set off many other plants that require a whitish background to bring out their beauty. Try it in front of heucheras and gas plants to see the possibilities along that line. It is also a highly useful plant in the formal garden, replacing there the untidy perennials and quickly disappearing annuals which are often used for white foliage effects in geometrical designs.

Complaints about its being short-lived and difficult to keep over winter can often be traced to a heavy soil not well drained. In my sandy medium it is quite indestructible, standing heat and cold, wet weather and drought with equal ease. No plant with this type of foliage can stand moisture's standing upon it for long periods; other than that, it seems not finicky at all. And contrary to all that has been written about its demand for sunshine, I find that it is perfectly happy in shade if drainage is looked after.

As every experienced grower knows, it varies not a little when grown from seeds, showing some difference in height of plant and even more in flower color. Selection of the latter will give one almost any shade of blue desired, after which division and cutting may be used for increase.

(August 15, 1938.) My long-time affection for the hoary-leaved *veronica* has been further cemented dur-

ing late years by its variety *rosea*, a plant of infinite charm and usefulness. I have long thought, and no doubt expressed the opinion in print, that no combination excels in beauty that of some shades of blue flowers and white foliage one gets from seeds of the type, but am now ready to admit that the pink variety *rosea* is entitled to that distinction. Here is a plant that possesses all the good points of type *incana* and is even better for cutting.

## **Astrantia Minor.**

(June 18, 1930.) It may be true, as Seneca wrote, that "difficulties strengthen the mind, as labor does the body," but I find little bracing influence following the most difficult task of flowering *Astrantia minor*, except that I am fully resolved never to try it again in this unsuitable climate. The adventure, which had its genesis in Farrer, where he calls it "one of the most precious alpine," was a most satisfying one, however, inasmuch as its beautiful foliage, deep glossy green and deeply cut, and its entrancing airy heads of white flowers on 6-inch stems were ample reward for the care needed to get it to that stage. And it does need care in this climate, first in germinating the seeds, which, like most umbellifers, are notoriously tardy in coming up, and later when it has to be shaded from the hot sun and provided with constant moisture at the roots. In addition, it requires an acid soil and more moisture than is in our dry atmosphere.

(Note: I have included the foregoing with the hope that it may interest growers in more favored localities in this "most precious of alpine.")

## **Reply to Mr. Rose.**

I read with much interest the notes of George E. Rose in the November 15 issue on new perennials and like his list very much. I should like to submit the observation, however, that a neighborhood nurseryman who confined his operations to those few novelties would likely find himself on the way out in a few years. They would be ideal for the

wholesaler of novelties, while we of local operations must have material with competitive prices attached to it as well as the 50-cent and dollar items of this list. In fact, I seriously doubt if there is a neighborhood grower outside swank areas that does not derive a major portion of his income from quarter sales, and many of us with a cash-and-carry trade cannot afford to overlook 15-cent transactions.

The foregoing observations are based entirely on a selfish foundation—that of profits. But permanent success in any enterprise has to take the little matter of service into consideration. In my opinion the neighborhood grower who does not offer some plants at a price within the reach of the lowest-salaried person in his territory is doing a disservice to American horticulture. But these are rather controversial matters, which would take far more space than is at our disposal if they are followed to a conclusion. And it is not at all what I started out to say.

The original purpose of these few paragraphs was that I wanted to say I rather resented his statement that "most such articles [he was referring to the ones which have appeared in the *American Nurseryman*] tend toward description of rare, difficult and little known plants, which, while interesting and botanically valuable, seem of little worth from a practical standpoint." If he means by "practical standpoint" that they are not suited to mass production, I plead guilty to the charge, but if he really refers to the garden value of the material which receives space in this department, that is another matter. Because *Astrantia minor*, the plant which immediately precedes these notes, cannot be grown by George E. Rose or C. W. Wood, that is no reason to dismiss it by calling it merely botanically valuable, for there are places in this broad country where it would be quite at home and where it would be a most valuable landscape plant. Nor will the half praise implied in the same term, botanically valuable, answer in the



cases of a thousand and one other good plants which are now seldom seen. Furthermore, because a plant is difficult in the hands of an uninterested person, who calls himself a gardener, is no valid reason for denying that plant to one who will take the time to grow and enjoy it. As I said before, I enjoyed Mr. Rose's article and hope that others will give us the results of their experiences.

#### Adonis Amurensis.

(April 14, 1932.) At no time of the year is magic so apparent as in spring. One goes out some morning to find a little bare spot where last night was snow and by noon big round knobs are showing through the damp soil, which, if given a little encouragement by the sun, will quickly elongate into 6-inch stems bearing big yellow buttercups. All that happens before the leaves get well started toward adding their beautiful ferny effect to the spring garden picture. A plant of so much value should be a part of every garden and would, I am sure, if gardeners knew about it and could find a source of supply. It should be added, though, that, like most plants, it has one undesirable feature—in this case, that of disappearing soon after the flowering period is over. Consequently, unless proper precautions are taken, as sowing seeds of annual alyssum or some other rapidly growing annual, a disconcerting bare spot will be there the remainder of the year.

The plant is easily accommodated in almost any soil in either sun or part shade and grows readily from fall-sown seeds. It is well to remember, however, that it resents disturbance after it becomes established in its home. A good plan for the neighborhood grower is to have large blooming-size clumps in the show garden and year-old plants in pots in frames to meet the demand the blooming plants will create.

#### Silene Maritima.

(June 23, 1937.) I begin to suspect that some nurserymen have little use for a plant that has not gone through a breeder's wringer and come out with most of its individuality removed. Others, I am sure, seem unable to see virtue in a familiar plant, especially one that has long been in gardens. The reactions of visiting growers to a planting of

the sea catchfly, *Silene maritima*, on a south wall confirms these suspicions. Many of the comments run something like this: "The plant is too common for my business." Or like this: "Too bad there isn't a double form of it." Unfortunately, there is a double variety, somewhat of a monstrosity, but it is the type, with its single white flowers, abundant in June and sparing from then until August, with its variety *rosea*, with pink blooms, that appeals to most gardeners. It is valuable not only for its pleasing flowers over a long period, but also because of its carpet of blue-green leaves, the entire plant seldom over three inches high. It appeals especially to the gardener with little time to spend over finicky plants, for it gives generously of its charms even in the face of neglect, asking only for a foothold in a well drained soil in sun or light shade. Incidentally, it is a splendid wall plant, standing the dry summers of the middle west without a murmur. It is easily grown from seeds or divisions and may also be grown from cuttings.

#### Stokes' Aster.

(September 18, 1939.) Stokes' aster, which is *Stokesia laevis* (cyanea) of botanists, varies not a little in nature, according to specimens I have seen, not only in size of flower, but also in color. In the latter, normalcy is pale blue to blue-purple on stems up to two feet in height, though there is a pure white form known. But between pale blue and blue-purple there are some pleasing shades which would no doubt become popular if they were segregated for propagation. One of the most pleasing of these that I have seen is the form known as *S. laevis* *lilacina* *grandiflora*, which translated in everyday language would be large-flowered, lilac-colored Stokes' aster, and that it literally is, with flowers normally about four inches across, though five inches is not unusual under good culture, and a color perhaps best described as silver-blue shading to lilac at the center. The flowering period of these plants, from August until heavy frost, is also in their favor. Add to the foregoing their ease of culture in ordinary garden soil that is well drained and we have a plant of more than ordinary value in all except the coldest parts of the country. Nor should one judge

its ability to stand cold by its natural range in South Carolina to Louisiana. Bailey records that it is hardy in New York and Massachusetts if given a good mulch in protected spots, though it cannot be depended upon to go through one of our really severe winters in northern Michigan, especially if snowfall is light. If uniformity of flower color is not necessary, the plant is easily propagated from fall-sown seeds, while the named forms may be grown from divisions.

#### TO FORM ARBORETUM BODY.

The proposal of the botanical gardens and arboreta committee of the American Association of Nurserymen that an organization of arboretum executives be formed received the support of the American Institute of Park Executives at its convention, as reported in this magazine November 1. The latter body adopted a resolution directing its president to appoint a committee on arboreta to form a plan for the organization of arboretum executives, to meet annually with the park executives.

Robert Pyle, chairman of the A.A.N. committee, has been informed by President V. K. Brown that he has made appointment of the following committee: Donald Wyman, Arnold Arboretum, Jamaica Plain, Mass., chairman; Henry Teuscher, Montreal Botanical Garden, Montreal, Canada; L. P. Jensen, Missouri Botanic Garden, Gray Summit, Mo.; Fred Leissler, University of Washington arboretum, Seattle, and Robert Pyle, West Grove, Pa.

#### ORDER OF BLOOM.

The order of bloom of trees and shrubs at the Arnold Arboretum is indicated by a 9-page list of plants in the November 29 bulletin of popular information. In his introductory notes, Dr. Donald Wyman remarks that there is some variation according to year and weather, but the sequence is generally the same. The list is made useful over a wide latitude because a schedule is given of the time *Kalmia latifolia* blooms in different regions, from northern Florida to Boston, Mass., and Seattle, Wash., with which the plants named in the list may be correlated in different localities.

# Tropical Shrubs from Leaf-bud Cuttings

*Technique of Propagation Suggested for Rhododendrons Tested on Plants Widely Grown in Florida, by John V. Watkins, of University of Florida*

The leaf-bud cutting technique of propagation for rhododendrons, described and illustrated in the May 1 issue of this magazine by H. T. Skinner, of Cornell University, apparently can also be applied to tender plants of different families. A conference with Mr. Skinner in July, 1938, suggested to John V. Watkins, assistant professor of horticulture at the University of Florida, the idea of testing this unusual method for the multiplication of certain tropical shrubs that are widely used in Florida horticulture, to ascertain the possibility of applying the method to less easily propagated material. He describes the results of his tests in the October Journal of the New York Botanical Garden.

It will be recalled that the method involves the cutting of buds with leaves attached, exactly as though they were to be used in shield budding. If a root-inducing chemical is to be employed, the buds are dipped or immersed for a time in the solution, following directions on the package. Leaf-bud cuttings of the tropical plants that were treated with solutions of indolebutyric acid developed heavy root systems much more quickly than did comparable cuttings that had been soaked in tap water for the same length of time.

After immersion, the cuttings are placed in the rooting medium that has been found best adapted for that species. While immersion or dipping in indolebutyric acid is seen to accelerate the rooting of the leaf-bud cuttings, it must be borne in mind that the tap-water checks all lived and that from one to several weeks later than the treated material, they all formed heavy root systems.

To determine the best rooting medium to use, leaf-bud cuttings were set in many different mixtures. Results showed that, for most of the tropical species studied, a combination of half European peat moss and half local sharp white sand (by volume) was satisfactory. Careful determinations of composite samples showed that the material, as used in these trials, had an acidity of pH 4.45.

In order to put the trials on a par

with practice common to many of the smaller commercial nurseries, all of the tests were conducted in simple ground benches in a standard half-shade lath house. The benches were built of pecky cypress, and the rooting media were filled in to a depth of six inches. Light frames of bamboo were covered with a double thickness of cheesecloth, and these were used in lieu of glass sash. The cloth frames were lifted daily for syringing, and the cloth was lightly sprinkled each afternoon to maintain a high humidity. No wilting has been observed and the results with this simple equipment are highly gratifying. In the northern Florida district, this system is most efficiently used from April through October, but on the southern end of

the peninsula, year-around use of this type of propagating frame is the rule.

When the cuttings are placed in the rooting medium, the stem tissue and the axillary bud are just barely covered, and the untrimmed leaf lies flat, allowing the stomata to be in close proximity to the constantly moist medium.

It has been shown that heavy root systems are produced much more rapidly on cuttings whose leaf area has not been reduced. It is important, therefore, with most plants that the leaves be left intact and the environment be so managed that transpiration will be kept at a minimum. As a result, wilting will be eliminated entirely. With very large-leaved plants, however, such as some of the new croton



Some typical leaf-bud cuttings and rooting responses on a selected group of tropical plants: Upper left, *Codium*; center, *Bougainvillea*; lower left, *Hibiscus*, all shown just as they have been taken from the stock plant; upper right, *Thunbergia grandiflora* alba, after two weeks in the cutting bench; lower right, *Hibiscus*, six weeks after potting.

hybrids, propagators will be compelled to cut down the leaves somewhat, if they are to get the greatest value from their propagating benches.

Scientific investigations show repeatedly that tissues of many plants in the region of buds are veritable storehouses for food materials and phytohormones. These tissues, therefore, should make good propagating material even though the amount of wood used is extremely small as compared to the standard cutting with long internodes. It is understood, of course, that the environment must be wholly congenial if a high percentage of living plants is to be obtained. It is worth noting that there were no dead cuttings either in the treated or the check lots that were a part of this trial.

An early investigator in the field of plant propagation showed that the temperature that is most suitable for the normal growth of the mature plant is a congenial temperature for the rooting of its tips as cuttings. Such a temperature was used in these experiments. The time that is required for a leaf-bud cutting of a tropical plant to form a heavy root system depends upon the season, the species and variety, and the environment into which the cutting is introduced. Several sorts formed heavy root systems in less than a month under the conditions of the preliminary experiment.

With the thought that the technique would be of little value to nurserymen if the axillary buds failed to make adequate growth, rooted leaf-bud cuttings of several species of tropical plants were potted up in the regular compost used in the department of horticulture. In these trials certain tropical species grew off in a highly gratifying manner. In fact, no variety in the preliminary trials failed to make adequate growth, and every one developed into a normal plant. The callous tissue which surrounds the cut surface in actively growing cuttings resulted, in these experiments, in a rounded stem's being formed exactly as in conventional cuttings.

This leaf-bud cutting technique has given gratifying results with certain varieties of azaleas, bougainvillea, codiaum (croton) and hibiscus in the trials during 1938-1939 at the University of Florida.

An 18-inch cane from a croton or hibiscus plant might give but four regular cuttings, whereas the same

shoot might yield twenty or more leaf-bud cuttings. Generally speaking, it has been observed in these tests that it is best to take these cuttings in the spring from shoots that have become firm after the first flush of growth. This propagating material should be neither succulent, nor yet hard and woody. The keen propagator will soon learn to know his wood at a glance.

If there is a distinctly limited amount of propagating material available, as is usually the case with rare plants, it seems that this technique should have a rather definite application in tropical horticulture, as well as with the ericaceous plants in the east. Its use would be restricted almost entirely to nurseries that wish to work up a large stock of plants from a small quantity of hard-to-get propagating wood.

#### YEAR-END SHRUBS FLOWER.

The Pennsylvania landscape is gloriously brightened by colorful leaves of trees and shrubs in November, but quickly it is over after a few sharp frosts and a succeeding rain and wind storm. Off come the leaves, to become again a part of the soil from which they came.

It is then we take notice of the beauty of our native witch hazel, *Hamamelis virginiana*, which in November and December clothes itself with its odd-shaped streamers, the golden color of which fits so splendidly into the landscape. The leaves of this plant, too, as if aware they have completed their functions, efface themselves, falling off to give the otherwise hidden flowers a chance to show. This Cinderella among shrubs truly becomes a princess at the year's end, and we appreciate it more in the absence of the more glamorous ones that now have gone from the scene.

Another shrub but little known, flowering at this time, is the sweet-scented *Elæagnus pungens*. Somewhat hidden among its evergreen foliage are the innumerable pale yellow tubular flowers, whose fragrance betrays their presence to the passerby. This plant, whose use is more common in the warmer states, has proved quite hardy here in Philadelphia, especially if employed as a subject against a sunny wall. Having persistent evergreen foliage, it really

should be used more to augment the few hardy evergreen vines that we may count on for winter foliage.

The little tried-and-true *Abelia grandiflora* is still continuing to flower despite cold days and still colder nights, and the few terminal sepals that persist long after the flowers have gone strengthen the popularity of this invaluable shrub, whose glossy semievergreen foliage is more beautiful at the end of the year than at any time during the season.

Edwin Matthews.

#### PLANT NEW YORK AVENUE.

The project of lining Sixth avenue, New York, with trees took on reality last month with the signing of the first tree-planting contract by Lewis & Conger, Forty-fifth street and Sixth avenue. Subsequent contracts were signed by William A. Kaiser, 408 Sixth avenue, and his neighbors, the United Realty Corp., Mrs. May Lange and Mortimer W. Byers. Contracts for the planting of twelve trees in the two blocks between Fifty-seventh and Fifty-ninth streets on Sixth avenue were signed by the St. Moritz hotel, Coronet apartments, Bowery Savings bank, Barbizon-Plaza hotel, Park Chambers, Medical Arts Center and Windsor and Buckingham hotels.

All these contracts were entered into with Horticulture, Inc., landscape contractor, which will proceed immediately with the tree planting in three sections. William J. Anderson, president of Horticulture, Inc., promised that the trees would be in place within two weeks. The sponsors of the tree-planting project believe that these three block plantings will serve as effective demonstrations which will help to speed the signing up of the rest of the property owners on Sixth avenue. No other tree planting is expected until next spring, but by that time, it is hoped to have the entire avenue lined with trees from Fourth street to Central park.

The entire cost of the planting and construction work involved will be met by the property owners along the avenue, but the planting will be supervised by the park department and will be done in accordance with its specifications. After one year, the trees will be taken over by the park department, which will assume



the responsibility for their care and maintenance.

It was agreed to plant mature trees ranging from four to five inches in diameter to six to seven inches in diameter, and from eighteen to twenty-two feet in height, with a spread of from ten to twelve feet. Oriental planes were decided upon, because of the resistance of this tree to handicaps of the city.

The cost of the tree is in many instances the smallest item of the planting cost, because of the subway conditions and other difficulties encountered. Where private vaults occur, pits have to be built of concrete with steel supports and waterproofing to protect the contents of the vault. This, with other complications, has raised the cost of a single tree planting to as high as \$800. Where the situation is normal, the cost per tree is approximately \$63.

It is proposed to place in front of each tree, embedded in the sidewalk, a bronze plaque, 3 1/2 x 6 inches, with the inscription "This Tree Donated by \_\_\_\_\_."

The first announcement last June that trees were planned for Sixth avenue spread throughout the country, according to Herbert Askwith, chief promoter of the tree-planting idea, and gave Sixth avenue a tremendous amount of advertising.

#### PINE FOR SEA COAST.

Over fifty years ago private experimental work was undertaken to find trees that would grow in the sandy glacial till of Nantucket island, Mass., and that would stand the sometimes violent gales carrying salt spray that sweep the island. Most successful of these proved to be the black Japanese pine, *Pinus Thunbergii*. In 1892 seeds of this pine were imported, and



Interior of Office of Wagoner Nurseries.

subsequently 3-year seedlings were set out near the eastern ocean shore of the island; today those trees are forty-five feet tall or more.

The trees grown from imported seeds were found to burn during the occasional severe winters. But trees grown from seeds taken from the original trees, which bore fertile cones when 11 years old, made possible a selection that produced a hardy strain, developed in three generations and known as the Nantucket strain. Nearly 75,000 trees grown from Nantucket seeds have been set out on the island and are thriving.

In 1936 the Nantucket Nursery was informally organized to take over the results of the half century of private experimental work. It sells no seeds, but offers only trees 4 years or more old, as younger ones are not

regarded as fit to set out in the rough. Other conifers have been found either too flexible or too stiff, or else they either wind burn or salt burn.

#### NEW OFFICE FOR WAGONER.

The Wagoner Nurseries, Hutchinson, Kan., of which C. D. ("Bill") Wagoner is owner, have moved into a new office, of which they are justifiably proud.

Of hollow tile-stucco construction, it is adjoined by a room for the wrapping and tying of bundles and by a large storage room.

The illustration of the interior shows the striking use which has been made of different wood finishes. The floor is of beech, while panels of knotty pine have been used here and there for trim. The many windows shaded with Venetian blinds make the room bright in any weather, while a wood-burning fireplace at the end of the room makes for good looks and comfort. Fittingly, in this shipshape room, the lighting fixtures were chosen in nautical design.

The parking space outside has been tripled in size, which has necessitated a change in the planting around the parking area. Approximately two acres eventually will be landscaped, which should make the place even more of a Mecca for customers and visitors.



Office and Adjoining Storage Building of Wagoner Nurseries.

# This Business of Ours

*Reflections on the Progress and Problems  
of the Nurseryman—By Ernest Hemming*

## SOCIAL SECURITY.

The trade papers and associations have recently been bragging about the more complete classification by Congress of nursery employees as agricultural labor and hence the greater exemption to the two social security taxes and likewise benefits. I, too, am pleased with the bookkeeping it saves us and also with the monetary saving, but my enthusiasm stops there. This article is no place for a discussion of the way the social security administration is set up or of the method in which it is financed. Aside from all that, I am in favor of social security for our employees. Just because our industry is truly agricultural in nature doesn't mean that it can't grow up. Why should we hide behind the skirts of the farmers? Our business is really highly technical and should, to be managed correctly, have a good executive to manage it. Success is impossible without accurately kept books. It is no more difficult for us to pay social security taxes than for the local dry goods merchant, and perhaps it is time we admitted we were an up-to-date industry.

Exclusive of exceptions, the industry does not pay high wages, and worse still, it is a business of marked seasonal variations in the number of employees. Often this is one of our excuses for claiming that we should be exempt, but I think it is a reason we should not be.

Most of our individual businesses are small enough so that there is a personal relationship and loyalty between boss and employee. To make our industry grow up, I think that we should assume a few more responsibilities to our labor. Our employees deserve a pension when they are old, even though they can work later in life in the nursery than they can in the factory. Unemployment compensation is certainly desirable to intermittently employed labor, although a part solution might be made by more capable management in the way of diversification, hence lengthening the season, especially in the retail field. Unduly increased wages would bankrupt every nursery in the United States right now, but I think a higher

wage standard desirable. It would be a solution to many of the problems of which we complain, for we should hire a better class of labor and produce better stock with less overproduction.

We are not the automobile industry, neither are we cotton farmers. We are the nursery industry and should have our own industrial dignity.

Sam Hemming.

## ELÆAGNUS PUNGENS.

I always remembered *Elæagnus pungens*, silver thorn, at least in the vicinity of Philadelphia, as a scraggly, uninteresting plant to have in a nursery. I suppose I took it for granted it had merit. Later I saw it in the south sending out long shoots and taking on the habit of a strong-growing vine and began to admit to myself it might have its uses, but it was not until I planted one near my porch and it got old enough to flower that I realized its great merit is in its fragrance when in bloom. During October it is a treat to be near it, as it perfumes the neighborhood. A woman passing along the street twenty-five feet away stopped to say, "What a delightful fragrance! I thought someone had dropped a bottle of perfume."

## BERRIES.

In previous years, we always looked forward to the fall display of berry-bearing plants. Usually the following are particularly good and last a long time: *Callicarpa purpurea*, *Ilex verticillata*, *Photinia villosa*, *Pyracantha Lalandi* and *Cornus florida*.

This year, for some unknown reason, the birds are stripping the plants overnight. In previous years the birds would eventually eat the berries when there was snow on the ground and other food became scarce, but so far this fall has been particularly mild, with not enough frost to take the leaves from the *callicarpa*.

One man remarked that maybe, the weather being mild, the birds are late in migrating, but why are they so hungry? They are even stripping the American holly. We like the birds, but we like our berries, too.

Ernest Hemming.

## SHORT ROWS

The outstanding concept of the American home you get as you drive across the country—and you see its reflection in the American nurseries—is of cones, needles, broad-leaves. To the nurserymen it reveals that deep and wide human wish for the encouraging effect of winter greenery to greet the eye during that long stretch of the calendar when deciduous species are asleep.

\* \* \* \* \*

Truck transit, by private wheelage and by the motor freight lines, enters more each year into the nurseryman's shipping activities. Many of the public lines are combining to work out practical transfer connections among themselves for expeditious forwarding and lower through tariffs.

\* \* \* \* \*

"Dakota Horticulture," the monthly magazine of the North and South Dakota horticultural societies, is now in its twelfth volume. Devoted to the interests of horticulture in the northern great plains, every issue contains nuggets of information for every northern nurseryman. It is edited and published by W. A. Simmons, secretary, Sioux Falls, S. D.

\* \* \* \* \*

Labor is doubtless agreed to be the largest single cost factor in every nursery, whatever its size and whatever it produces. Man-hours is the unit; cents-per-hour is the unit cost. Systematic separation of labor cost—daily, automatically—so that each crop bears its share of the burden, is the trick that reveals facts about price and profit. It is simple in a machine shop. There are men who say it can be done in the nursery.

\* \* \* \* \*

Those 50-foot elms recently planted in downtown New York illustrate these can't-wait times. To estate owner or cottager the size and cost of have-it-now is mere comparative wallet measure. Lots of boys have loads of fun with old postage stamps that don't cost a dime, and a man last week paid a thousand bucks for one old issue just because a printer's mistake was plainly visible. One reason why fast-growing trees, like Chinese elms, sell themselves is the broad human wish for immediate effect.

# Coming Events

## CONVENTION CALENDAR.

Out of the score or more state and regional associations which will hold their annual meetings in the next two months, some have already announced dates and location definitely, while others have made only preliminary arrangements. The calendar, according to notices thus far received, is as follows:

December 18, Northern Retail Nurserymen's Association, Hotel Lowry, St. Paul, Minn.

December 19 and 20, Minnesota State Nurserymen's Association, Hotel Lowry, St. Paul.

January 3 to 5, Western Association of Nurserymen, Hotel Muehlebach, Kansas City, Mo.

January 3, Association of Kansas Nurserymen, Hotel Muehlebach, Kansas City.

January 3, Missouri State Nurserymen's Association, Hotel Muehlebach, Kansas City.

January 9, Massachusetts Nurserymen's Association, Hotel Kenmore, Boston.

January 9, Georgia State Nurserymen's Association, Augusta.

January 9 to 11, Illinois State Nurserymen's Association, Hotel La Salle, Chicago.

January 9 and 10, Oklahoma State Nurserymen's Association, Hotel Huckins, Oklahoma City.

January 12, New York State Nurserymen's Association, Seneca hotel, Rochester.

January 16 to 18, Ohio Nurserymen's Association, Cleveland.

January 17, American Association of Nurserymen, conference of region 3, Carter hotel, Cleveland, Ohio.

January 17 and 18, Iowa Nurserymen's Association, Ames, annual meeting and short course.

January 23 and 24, Indiana Nurserymen's Association, Athenæum, Indianapolis.

January 24 and 25, Pennsylvania Nurserymen's Association, Philadelphia.

January 24 and 25, New Jersey Association of Nurserymen, Hotel Hildebrecht, Trenton, adjourning to join meeting at Philadelphia.

January 25 and 26, Tennessee State Nurserymen's Association, Peabody hotel, Memphis.

January 29, Kentucky Nurserymen's Association, Louisville.

January 30 to February 1, New England Nurserymen's Association, New Haven or Bridgeport, Conn.

February 5 to 9, second annual short course, Rutgers University, New Brunswick, N. J.

Secretaries of state trade associations who wish announcements of dates or programs of annual meetings in these columns are requested to send in notices early. Issued on the first and fifteenth of each month, the magazine's forms close five days prior to the date of issue. For the January 1 issue, copy should reach the editor by December 27.

February 7 and 8, Michigan Nurserymen's Association, Hotel Olds, Lansing.

February 7 and 8, Wisconsin Nurserymen's Association, Hotel Schroeder, Milwaukee.

February 8 and 9, Cincinnati Landscape Association, seventh annual school, Cincinnati.

February 14 and 15, Maryland Nurserymen's Association, College Park, short course and meeting.

## NORTHERN RETAILERS.

The program of the Northern Retail Nurserymen's Association for its annual meeting, at the Lowry hotel, St. Paul, Minn., December 18, covers two sessions, following the annual dinner at 1 p. m., instead of just an evening session.

After the midday dinner will follow the roll call of members, the president's address by Vernon Marshall, Arlington, Neb., and the secretary's report by C. C. Smith, Charles City, Ia.

After reports on sales conditions by various members, the following speakers are listed on the program: E. C. Hilborn, Valley City, N. D., on "Competing with the Catalogue and Sales Yard"; C. C. Smith, on "Pepping Up the Salesman," and Bj. Loss, Lake City, Minn., on "Control of the Irresponsible Dealer."

In the evening Chet Marshall, Arlington, Neb., will speak on "The Future of the Agency Nursery Business," and Richard P. White, executive secretary of the American Asso-

ciation of Nurserymen, Washington, D. C., will bring greetings from the national body. The session will close with a general discussion, "Are Retail Prices Right?" and the reports of committees.

## MINNESOTA PROGRAM.

The opening session of the fourteenth annual meeting of the Minnesota State Nurserymen's Association will be held Tuesday morning, December 19, when President J. K. Andrews will deliver his official message, and R. S. Reid will give his report as treasurer. At this session J. S. Jones, secretary of the Minnesota farm bureau, St. Paul, will address the gathering, in addition to Richard P. White, A. A. N. executive secretary.

Other speakers and their subjects are as listed in the December 1 issue, with the addition of J. H. Stoekeler, of the lake states experiment station, who will speak on "United States Forest Service, Nursery Practice and Reforestation Activities."

The afternoon meetings of the two days will be devoted to the speakers, while the morning session December 20 will be a closed executive meeting, open to owners of nurseries or partners in good standing.

The usual informal buffet supper will be held on the evening of December 19, with State Senator M. R. Cashman as toastmaster.

## WESTERN ASSOCIATION.

The meeting of the Western Association of Nurserymen, to be held at the Hotel Muehlebach, Kansas City, Mo., January 4 and 5, will be preceded by a retail nurserymen's meeting at 2 p. m., January 3.

The first session will open at 10 a. m. January 4, with roll call and introduction of members. After open-

[Concluded on page 16.]

## ATTENTION NURSERYMEN!

**The 24th Annual Convention of the Illinois State Nurserymen's Association will be held January 9, 10 and 11, 1940, at the Hotel La Salle, Chicago, Ill.**

We extend a personal invitation to all nurserymen and allied tradesmen to exhibit at this convention, which we believe will be the largest meeting of its kind, where your products can be exhibited at the smallest cost of any result-producing medium. Booths can be had for as low as \$30.00 for the 3-day convention.

For booth space and full particulars write to Ernest Kruse, Wheeling, Ill.



# SPECIAL PRICES FOR DECEMBER ONLY

See our FALL WHOLESALE PRICE LIST for more complete list of lining-out and finished stock in  
**HARDY ORNAMENTAL FLOWERING SHRUBS, HEDGE PLANTS,  
 FOREST AND SHADE TREES, EVERGREENS, VINES, CREEPERS AND FRUIT TREES.**

Special discount for December only: \$50.00 to \$100.00—5%. \$100.00 to \$300.00—10%. \$300.00 and up—15%.

Additional discount of 5% and free packing for cash with order except on B&B material. Net June 1. This discount applies to stock offered in this list and booked this month. All stock guaranteed to be in first-class condition and good quality. No order accepted for less than 50 plants in any variety or grade except trees 5 to 6 feet or larger and not less than 10 of this size at this discount. Wire order Western Union collect for orders of \$100.00 or more.

## HARDY DECIDUOUS FLOWERING SHRUBS

S.—Seedlings; C.—Rooted Cuttings; Tr.—Transplanted; Br.—Branched; L. O.—Lining Out; Div.—Divisions

**ARONIA ARBUTIFOLIA.** Red Chokeberry.  
**ARONIA MELANOCARPA.** Black Chokeberry.

	Per 100	Per 1000
12 to 18 ins., l. o. div.	\$1.00	\$ 8.00
18 to 24 ins., l. o. div.	1.25	10.00
2 to 3 ft., l. o. div.	1.50	12.50

**BENZONIA FESTIVALE.** Spicebush.  
 12 to 18 ins., s. \$1.10 \$10.00  
 18 to 24 ins., s. 2.00 15.00

**BERBERIS THUNBERGII.** Japanese Barberry.  
 3 to 6 ins., s. \$0.50 \$ 4.00  
 6 to 9 ins., s. .60 5.00  
 9 to 12 ins., s. 1.00 8.00  
 12 to 15 ins., s. 1.50 12.50  
 15 to 18 ins., s. 3.00 25.00  
 18 to 24 ins., s. 4.00 35.00  
 9 to 12 ins., tr. 3.50 30.00  
 12 to 15 ins., tr. 6.00 50.00  
 15 to 18 ins., tr. 8.00 70.00  
 18 to 24 ins., tr. 10.00 90.00  
 24 to 30 ins., tr. 12.00 100.00  
 Less 10% discount on seedlings in lots of 10,000.

**CALICARPA AMERICANA.** American Beauty-berry.  
 12 to 18 ins., s. \$2.25 \$18.00  
 18 to 24 ins., s. 3.00 25.00  
 18 to 24 ins., tr. 7.00  
 2 to 3 ft., tr. 8.00

**CALYCANTHUS FLORIDUS.** Sweet Shrub.  
 4 to 6 ins., s. \$0.50 \$ 4.00  
 6 to 12 ins., s. 1.00 8.00  
 12 to 18 ins., s. 1.25 10.00  
 18 to 24 ins., s. 2.00 15.00

**CEPHALANTHUS OCCIDENTALIS.** Buttonbush.  
 12 to 18 ins., s. \$1.25 \$10.00  
 18 to 24 ins., s. 1.50 12.00  
 18 to 24 ins., tr. 10.00  
 2 to 3 ft., tr. 12.50  
 3 to 4 ft., tr. 15.00

**CORNUS AMOMUM.** Silky Dogwood.  
**CORNUS SANGUINEA.** Blood Twig Dogwood.  
 6 to 12 ins., c. \$1.00 \$ 8.00  
 12 to 18 ins., c. 1.25 10.00  
 18 to 24 ins., c. 2.00 15.00  
 12 to 18 ins., tr. 2.50 20.00  
 18 to 24 ins., tr. 4.00 35.00  
 2 to 3 ft., tr. 6.00 50.00  
 3 to 4 ft., tr. 10.00 90.00

**CORNUS STOLONIFERA.** Red Osier Dogwood.  
 6 to 12 ins., s. \$0.60 \$ 5.00  
 12 to 18 ins., s. .70 6.00  
 18 to 24 ins., s. .80 7.00  
 2 to 3 ft., s. .90 8.00  
 12 to 18 ins., tr. 2.50 20.00  
 18 to 24 ins., tr. 3.00 25.00  
 2 to 3 ft., tr. 4.00 35.00  
 3 to 4 ft., tr. 6.50 60.00

**CYDONIA JAPONICA.** Japanese Quince.  
 6 to 12 ins., s. \$1.25 \$10.00  
 12 to 18 ins., s. 1.50 12.00  
 18 to 24 ins., s. 2.00 15.00

### DEUTZIA SCABRA.

Varieties:  
 Candidissima, single white.  
 Candidissima Flore-pleno, double white.  
 Crenata, double pink.  
 Fortunei, double rose.  
 Pride of Rochester, double rose.

	Per 100	Per 1000
6 to 12 ins., c. l. o.	\$1.00	\$ 8.00
12 to 18 ins., c. l. o.	1.25	10.00
18 to 24 ins., c. l. o.	1.50	12.50
12 to 18 ins., tr., well br.	3.50	30.00
18 to 24 ins., tr., well br.	4.00	35.00

**HAMAMELIS VIRGINIANA.** Witch Hazel.  
 6 to 12 ins., s. \$2.00 \$15.00  
 12 to 18 ins., s. 2.50 20.00  
 18 to 24 ins., s. 3.00 25.00  
 2 to 3 ft., br. 10.00  
 3 to 4 ft., br., heavy 25.00

**HIBISCUS.** Mallow Marvel, mixed colors.

	Per 100	Per 1000
1-yr. s., No. 1	\$0.75	\$ 6.00
1-yr. s., No. 2	.60	5.00
2-yr. s., No. 1	1.00	8.00
2-yr. s., No. 2	.75	6.00
2-yr., heavy	8.00	

**HYDRANGEA PANICULATA GRANDIFLORA.** Peegee Hydrangea.

	Per 100	Per 1000
6 to 12 ins., l. o.	\$3.50	\$30.00
12 to 18 ins., l. o.	4.50	40.00
18 to 24 ins., l. o.	6.00	50.00
12 to 18 ins., tr.	12.00	
18 to 24 ins., tr.	15.00	

**HYPERICUM DENSIFLORUM.**

**HYPERICUM PROLIFICUM.**  
 6 to 12 ins., s. \$1.25 \$10.00  
 12 to 18 ins., s. 2.00 15.00  
 12 to 18 ins., tr. 6.00 50.00  
 18 to 24 ins., tr. 8.00 70.00  
 2 to 3 ft., tr. 10.00 90.00

**LIGUSTRUM AMURENSE.** Amoor River

North Privet.  
 6 to 15 ins., l. o. \$0.60 \$ 5.00  
 6 to 12 ins., 2 br., up .80 6.00  
 12 to 18 ins., 2 br. 1.00 9.00  
 12 to 18 ins., 3 br., up 1.50 12.00  
 18 to 24 ins., 2 br. 1.50 12.00  
 18 to 24 ins., 3 br., up 2.00 15.00  
 2 to 3 ft., 4 br., up 2.50 20.00  
 Less 10% discount in 10,000 lots.

**LIGUSTRUM IBOLIUM.** Ibolium Privet.

	Per 100	Per 1000
6 to 12 ins., 2 br., up	\$1.25	\$ 8.00
12 to 18 ins., 2 br.	1.50	10.00
12 to 18 ins., 3 br., up	2.00	15.00
18 to 24 ins., 3 br., up	2.50	20.00

**LIGUSTRUM OBTUSIFOLIUM.**

Ibota Privet.  
 12 to 18 ins., s. \$1.00 \$ 8.00  
 18 to 24 ins., s. 1.25 10.00  
 6 to 12 ins., 2 br., up .80 6.00  
 12 to 18 ins., 2 br. 1.00 9.00  
 12 to 18 ins., 3 br., up 1.50 12.00  
 18 to 24 ins., 2 br. 1.50 12.00  
 18 to 24 ins., 3 br., up 2.00 15.00  
 2 to 3 ft., 3 br., up 3.00 25.00

**LIGUSTRUM OVALIFOLIUM.** California

Privet.  
 6 to 15 ins., l. o. \$0.50 \$ 4.00  
 6 to 12 ins., 2 br., up .60 5.00  
 12 to 18 ins., 2 br. 1.00 8.00  
 Grafting grade 1.00 8.00  
 12 to 18 ins., 3 br., up 1.25 10.00  
 18 to 24 ins., 2 br. 1.25 10.00

**LIGUSTRUM SINENSE.** South Privet.

	Per 100	Per 1000
6 to 12 ins., s.	\$0.40	\$ 3.00
12 to 18 ins., s.	.50	4.00
18 to 24 ins., s.	.70	6.00
2 to 3 ft., s.	1.00	8.00
12 to 18 ins., tr.	1.25	10.00
18 to 24 ins., tr.	2.00	15.00
2 to 3 ft., tr.	2.50	20.00
3 to 4 ft., tr.	3.50	30.00

Less 10% discount in lots of 10,000.

**LONICERA FRAGRANTISSIMA.** Winter

Honeysuckle.  
 6 to 12 ins., c. \$1.50 \$12.00  
 12 to 18 ins., c. 2.00 15.00  
 18 to 24 ins., c. 2.50 20.00  
 12 to 18 ins., 2-yr., 3 br., up 3.50 30.00  
 18 to 24 ins., 2-yr., 3 br., up 4.50 40.00  
 2 to 3 ft., 2-yr., 4 br., up 6.00 50.00  
 3 to 4 ft., 2-yr., 4 br., up 10.00

**LONICERA MORROWI.** Morrow's Honey-

suckle.

**LONICERA RUPESTRIS.** Manchurian

Honeysuckle.

**LONICERA TATARICA.** Tatarian Honey-

suckle.

Varieties:

Alba, white.

Rosa, pink.

Rubra, red.

	Per 100	Per 1000
6 to 12 ins., c.	\$3.00	\$15.00
12 to 18 ins., c.	2.50	20.00
18 to 24 ins., c.	3.00	25.00
12 to 18 ins., hedging	4.00	35.00
18 to 24 ins., hedging	5.00	45.00

**RHUS CANADENSIS.** (Aromatic) Fra-

grant Sumac.  
 6 to 12 ins., s. \$1.50 \$12.00  
 12 to 18 ins., s. 2.50 20.00  
 18 to 24 ins., s. 3.00 25.00  
 18 to 24 ins., tr. 10.00 90.00  
 2 to 3 ft., tr. 12.50 100.00

**RHUS COPALLINA.** Shining Sumac.

	Per 100	Per 1000
12 to 18 ins., s.	\$0.75	\$ 6.00
18 to 24 ins., s.	.90	7.00
18 to 24 ins., tr., br.	4.00	35.00
2 to 3 ft., tr., br.	5.00	45.00
3 to 4 ft., tr., br.	8.00	70.00

**RHUS.** Sumac.

Varieties:

Glabra, smooth Sumac.

Typhina, Staghorn Sumac.

	Per 100	Per 1000
12 to 18 ins., s.	\$0.75	\$ 6.00
18 to 24 ins., s.	.90	7.00
2 to 3 ft., s.	1.25	10.00
3 to 4 ft., s.	2.50	20.00
4 to 5 ft., s.	4.00	35.00
5 to 6 ft., s.	6.00	50.00
3 to 4 ft., tr., br.	8.00	60.00
4 to 5 ft., tr., br.	10.00	80.00

**SPIREAE ARGUTA.** Garland Spirea.

	Per 100	Per 1000
6 to 12 ins., c.	\$3.00	\$25.00
12 to 18 ins., c.	3.50	30.00
18 to 24 ins., c.	4.00	35.00
12 to 18 ins., hedging	4.50	40.00
18 to 24 ins., hedging	5.50	50.00
12 to 18 ins., 2-yr., tr.	6.00	
18 to 24 ins., 2-yr., tr.	8.00	
2 to 3 ft., 2-yr., tr.	10.00	
3 to 4 ft., 2-yr., tr.	12.00	

**SPIREAE THUNBERGII.** Thunberg's

Spirea.  
 6 to 12 ins., c. \$3.00 \$25.00  
 12 to 18 ins., c. 3.50 30.00  
 18 to 24 ins., c. 4.00 35.00  
 18 to 24 ins., tr. 7.00 60.00  
 2 to 3 ft., tr. 9.00 80.00

**SPIREAE VANHOUTTEI.**

	Per 100	Per 1000
L. o. field-grown	\$0.80	\$ 7.00
6 to 12 ins., 1-yr., c.	1.00	9.00
12 to 18 ins., 1-yr., c.	1.25	11.00
18 to 24 ins., 1-yr., c.	1.75	14.00
12 to 18 ins., hedging	2.50	20.00
18 to 24 ins., hedging	3.00	25.00
2 to 3 ft., hedging	4.00	35.00
18 to 24 ins., well br.	5.00	40.00
2 to 3 ft., well br.	7.00	60.00
3 to 4 ft., well br.	10.00	

Less 10% discount on hedging grade and cuttings in 10,000 lots.

**SYMPHORICARPOS VULGARIS.** Coral-

berry.

	Per 100	Per 1000
6 to 12 ins., 1-yr., c.	\$1.00	\$ 8.00
12 to 18 ins., 1-yr., c.	1.25	10.00
18 to 24 ins., 1-yr., c.	2.00	15.00
12 to 18 ins., tr.	3.50	30.00
18 to 24 ins., tr.	4.50	40.00
2 to 3 ft., tr.	8.00	60.00
3 to 4 ft., tr.	10.00	

**WEIGELA.**

Varieties:

Amabilis, light pink.

Rosa, pink.

	Per 100	Per 1000
6 to 12 ins., c.	\$1.50	\$12.50
12 to 18 ins., c.	2.00	15.00
18 to 24 ins., c.	2.50	20.00
12 to 18 ins., tr., br.	3.50	30.00
18 to 24 ins., tr., br.	5.00	45.00
2 to 3 ft., tr., br.	9.00	80.00

**WEIGELA VARIEGATA.** Pink flower,

variegated.

	Per 100	Per 1000
6 to 12 ins., c.	\$2.00	\$15.00
12 to 18 ins., c.	2.50	20.00
18 to 24 ins., c.	3.00	25.00
2 to 3 ft., c.	8.00	70.00
12 to 18 ins., well br.	4.50	40.00
18 to 24 ins., well br.	6.00	50.00

Please check up your want list and let us have your order for immediate or future shipment, as you prefer, before spring prices are made up, which will be higher than present prices.

## FOREST AND SHADE TREES

ACER DASYCARPUM. Silver Maple.		
Per 100 Per 1000		
6 to 12 ins., s.	\$0.50	\$ 3.00
12 to 18 ins., s.	.60	5.00
18 to 24 ins., s.	1.00	7.00
3 to 4 ft., s.	2.00	15.00
4 to 5 ft., br.	5.00	40.00
5 to 6 ft., br.	6.00	50.00
6 to 8 ft., br.	10.00	80.00
4 to 5 ft., tr., br.	10.00	80.00
5 to 6 ft., tr., br.	15.00	120.00
6 to 8 ft., tr., br.	20.00	160.00
8 to 10 ft., tr., br.	30.00	240.00
1 1/4 to 1 1/2 in. cal.	40.00	320.00
1 1/2 to 2 in. cal.	50.00	400.00

ACER RUBRUM. Red or Scarlet Maple.		
Per 100 Per 1000		
6 to 12 ins., s.	\$1.00	\$ 3.00
12 to 18 ins., s.	1.25	3.00
18 to 24 ins., s.	1.50	12.00
3 to 4 ft., tr., br.	35.00	12.00
6 to 8 ft., tr., br.	50.00	12.00
8 to 10 ft., tr., br.	70.00	12.00

ACER SACCHARUM. Sugar or Hard Maple.		
Per 100 Per 1000		
6 to 12 ins., s.	\$0.60	\$ 3.00
12 to 18 ins., s.	1.00	8.00
18 to 24 ins., s.	1.25	10.00
2 to 3 ft., s.	1.50	12.00
2 to 3 ft., s.	2.50	20.00

ESCLUS PAVIA RUBRA. Dwarf Buckeye, red flowers.		
Per 100 Per 1000		
3 to 6 ins., s.	\$2.50	\$20.00
6 to 12 ins., s.	3.00	25.00
12 to 18 ins., s.	3.50	30.00

BETULA NIGRA. River Birch.		
Per 100 Per 1000		
12 to 18 ins., s.	\$1.25	\$ 9.00
18 to 24 ins., s.	1.50	12.00
2 to 3 ft., s.	2.00	15.00

CATALPA BIGNONOIDES. Common Catalpa.		
Per 100 Per 1000		
6 to 12 ins., s.	\$0.40	\$ 3.50
12 to 18 ins., s.	.60	5.00
18 to 24 ins., s.	1.25	10.00
2 to 3 ft., s.	8.00	10.00
3 to 4 ft., tr.	10.00	10.00
4 to 5 ft., tr.	12.00	10.00
6 to 8 ft., tr.	20.00	10.00

CERCIS CANADENSIS. American Redbud.		
Per 100 Per 1000		
6 to 12 ins., s.	\$0.60	\$ 5.00
12 to 18 ins., s.	1.00	8.00
18 to 24 ins., s.	1.25	10.00
2 to 3 ft., s.	2.00	15.00
3 to 4 ft., s.	3.50	30.00
4 to 5 ft., s.	6.00	50.00
2 to 3 ft., tr.	12.50	10.00
3 to 4 ft., tr.	17.50	25.00
4 to 5 ft., tr.	35.00	10.00
6 to 8 ft., tr.	50.00	10.00
8 to 10 ft., tr.	75.00	10.00

CORNUS FLORIDA. White-flowering Dogwood.		
Per 100 Per 1000		
6 to 12 ins., s.	\$1.50	\$12.00
12 to 18 ins., s.	2.25	18.00
18 to 24 ins., s.	2.75	22.00
2 to 3 ft., s.	4.50	40.00
Special grafting grade	2.50	20.00
2 to 3 ft., s., 2-yr., well br.	10.00	90.00
5-7/16 in.	10.00	90.00

DIOSPYROS VIRGINIANA. American Persimmon.		
Per 100 Per 1000		
3 to 6 ins., s.	\$0.40	\$ 3.00
6 to 12 ins., s.	.50	4.00
12 to 18 ins., s.	.60	5.00
18 to 24 ins., s.	.80	7.00
2 to 3 ft., s.	1.00	8.00

FAGUS AMERICANA. American Beech.		
Per 100 Per 1000		
4 to 6 ins., s.	\$0.50	\$ 4.00
6 to 12 ins., s.	.70	6.00
12 to 18 ins., s.	1.00	8.00
18 to 24 ins., s.	1.50	12.00
2 to 3 ft., s.	2.00	15.00

FRAXINUS AMERICANA. White Ash.		
Per 100 Per 1000		
6 to 12 ins., s.	\$0.35	\$ 2.50
12 to 18 ins., s.	.50	4.00
18 to 24 ins., s.	.60	5.00
2 to 3 ft., s.	.80	7.00
3 to 4 ft., tr.	1.25	10.00
4 to 5 ft., tr.	4.00	30.00
5 to 6 ft., tr.	15.00	10.00
6 to 8 ft., tr.	25.00	10.00

GINKGO BILOBA. Maidenhair Tree.		
Per 100 Per 1000		
4 to 6 ins., s.	\$2.50	\$20.00
6 to 9 ins., s.	3.50	25.00
9 to 12 ins., s.	4.00	30.00
12 to 18 ins., s.	5.00	40.00
18 to 24 ins., s.	6.50	60.00

GLEDITSIA TRIACANTHOS. Honey Locust.		
Per 100 Per 1000		
4 to 6 ins., s.	\$0.30	\$ 2.00
6 to 12 ins., s.	.50	3.50
12 to 18 ins., s.	.60	5.00
18 to 24 ins., s.	1.00	8.00
2 to 3 ft., s.	1.25	10.00

LIQUIDAMBAR STYRACIFLUA. Sweet Gum.		
Per 100 Per 1000		
6 to 12 ins., s.	\$1.00	\$ 8.00
12 to 18 ins., s.	1.50	12.00
18 to 24 ins., s.	2.25	17.50
3 to 4 ft., tr.	25.00	200.00
4 to 5 ft., tr.	30.00	240.00
5 to 6 ft., tr.	35.00	280.00
6 to 8 ft., tr.	60.00	480.00
8 to 10 ft., tr.	100.00	800.00
1 1/4 to 1 1/2 in. cal.	120.00	960.00
1 1/2 to 2 in. cal.	120.00	960.00

LIRIODENDRON TULIPIFERA. Tulip Tree.		
Per 100 Per 1000		
4 to 6 ins., s.	\$0.45	\$ 3.50
6 to 12 ins., s.	.60	5.00
12 to 18 ins., s.	.80	7.00
18 to 24 ins., s.	1.25	10.00
2 to 3 ft., s.	1.50	12.00
3 to 4 ft., s.	2.50	20.00
2 to 3 ft., tr.	15.00	125.00
3 to 4 ft., tr.	25.00	200.00
4 to 5 ft., tr.	30.00	240.00
5 to 6 ft., tr.	35.00	280.00
6 to 8 ft., tr.	60.00	480.00
8 to 10 ft., tr.	80.00	640.00
1 1/4 to 1 1/2 in. cal.	100.00	800.00
1 1/2 to 2 in. cal.	120.00	960.00

MACLURA POMIFERA. Osage Orange.		
Per 100 Per 1000		
4 to 6 ins., s.	\$0.30	\$ 2.00
6 to 12 ins., s.	.40	3.00
12 to 18 ins., s.	.50	4.00
18 to 24 ins., s.	.70	6.00
2 to 3 ft., s.	1.00	8.00

MAGNOLIA MACROPHYLLA. Bigleaf Magnolia.		
Per 100 Per 1000		
3 to 6 ins., s.	\$2.00	\$15.00
6 to 12 ins., s.	3.00	25.00
12 to 18 ins., s.	3.50	30.00
18 to 24 ins., s.	4.50	40.00
2 to 3 ft., s.	5.50	50.00

MORUS ALBA TATARICA. Russian Mulberry.		
Per 100 Per 1000		
6 to 12 ins., s.	\$0.40	\$ 3.00
12 to 18 ins., s.	.60	5.00
18 to 24 ins., s.	.80	7.00
2 to 3 ft., s.	1.00	9.00
2 to 3 ft., tr.	12.00	100.00
3 to 4 ft., tr.	15.00	120.00

OXYDENDRON ARBOREUM. Sourwood.		
Per 100 Per 1000		
6 to 12 ins., s.	\$1.00	\$ 8.00
12 to 18 ins., s.	1.25	10.00
18 to 24 ins., s.	1.50	12.00
18 to 24 ins., tr.	8.00	64.00
2 to 3 ft., tr.	12.00	96.00

PLATANUS OCCIDENTALIS. American Plane Tree.		
Per 100 Per 1000		
6 to 12 ins., s.	\$0.60	\$ 5.00
12 to 18 ins., s.	.90	7.00
18 to 24 ins., s.	1.25	10.00
2 to 3 ft., s.	1.50	12.00
3 to 4 ft., s.	3.00	25.00
4 to 5 ft., tr.	12.00	100.00
5 to 6 ft., tr.	17.50	150.00
6 to 8 ft., tr.	24.00	200.00
8 to 10 ft., tr.	40.00	320.00
1 1/4 to 1 1/2 in. cal.	60.00	480.00
1 1/2 to 2 in. cal.	80.00	640.00

POPULUS NIGRA ITALICA. Lombardy Poplar.		
Per 100 Per 1000		
12 to 18 ins., c.	\$1.25	\$10.00
18 to 24 ins., c.	1.50	12.00
2 to 3 ft., c.	2.25	17.50
3 to 4 ft., c.	3.00	25.00
4 to 5 ft., c.	4.00	35.00
5 to 6 ft., c.	6.00	50.00
3 to 4 ft., tr.	7.00	56.00
4 to 5 ft., tr.	10.00	80.00
5 to 6 ft., tr.	15.00	120.00
6 to 8 ft., tr.	25.00	200.00

PTERIS TRIFOLIATA. Hop Tree.		
Per 100 Per 1000		
4 to 6 ins., s.	\$3.00	\$24.00
6 to 12 ins., s.	4.00	32.00
12 to 18 ins., s.	5.00	40.00
18 to 24 ins., s.	6.00	48.00

Write for a copy of  
our trade list

## QUERCUS. Oaks.

Varieties:		
Alba, White oak.		
Bicolor, Swamp White oak.		
Coccinea, Scarlet oak.		
Lyrata, Overcup oak.		
Macrocarpa, Mossy Cup oak.		
Nigra, Water oak.		
Phellos, Willow oak.		
Prinus, Chestnut oak.		
Rubra, Red oak.		
Velutina, Black oak.		
Per 100 Per 1000		
4 to 6 ins., s.	\$0.70	\$ 6.00
6 to 12 ins., s.	1.50	10.00
12 to 18 ins., s.	2.50	20.00
18 to 24 ins., s.	3.50	30.00
2 to 3 ft., s.	4.50	40.00
ROBINIA PSEUDOACACIA. Black Locust.		
Per 100 Per 1000		
4 to 6 ins., s.	\$0.30	\$ 2.00
6 to 12 ins., s.	.40	3.00
12 to 18 ins., s.	.90	5.00
18 to 24 ins., s.	.70	6.00
2 to 3 ft., s.	1.25	9.00
3 to 4 ft., s.	1.50	12.00
ULMUS AMERICANA. American Elm.		
Per 100 Per 1000		
6 to 12 ins., s.	\$0.40	\$ 3.00
12 to 18 ins., s.	.60	5.00
18 to 24 ins., s.	.70	6.00
2 to 3 ft., s.	1.25	10.00
4 to 5 ft., tr.	15.00	120.00
5 to 6 ft., tr.	20.00	160.00
6 to 8 ft., tr.	35.00	280.00
8 to 10 ft., tr.	60.00	480.00
ULMUS PUMILA. Chinese Elm.		
Per 100 Per 1000		
6 to 12 ins., s.	\$0.40	\$ 3.00
12 to 18 ins., s.	.60	5.00
18 to 24 ins., s.	1.00	8.00
2 to 3 ft., s.	1.25	10.00
3 to 4 ft., s.	2.00	15.00

## Vines and Creepers

BIGNONIA RADICANS. Trumpet Creeper.		
Per 100 Per 1000		
6 to 12 ins., 1-yr., s.	\$1.25	\$10.00
12 to 18 ins., 1-yr., s.	1.50	12.00
18 to 24 ins., 2-yr., tr., No. 1.	5.50	50.00
12 to 18 ins., 2-yr., tr., No. 2.	4.00	35.00
2 to 3 ft., 3-yr., tr., No. 1.	6.50	60.00
CELASTRUS ORBICULATUS. Oriental Bittersweet.		
Per 100 Per 1000		
6 to 12 ins., s.	\$1.25	\$10.00
12 to 18 ins., s.	1.50	12.00
18 to 24 ins., s.	2.00	15.00
12 to 18 ins., tr., br., No. 2.	4.50	40.00
18 to 24 ins., tr., br., No. 1.	5.50	50.00
2 to 3 ft., extra heavy.	6.50	60.00
CELASTRUS SCANDENS. American Bittersweet.		
Per 100 Per 1000		
6 to 12 ins., l. o.	\$1.25	\$10.00
12 to 18 ins., 1-yr., s.	1.50	12.00
18 to 24 ins., 1-yr., s.	2.00	15.00
12 to 18 ins., tr., br.	4.50	40.00
18 to 24 ins., tr., br.	5.50	50.00
2 to 3 ft., tr., br.	6.50	60.00
6 to 12 ins., c., fruiting.	2.50	20.00
12 to 18 ins., c., fruiting.	3.00	25.00
18 to 24 ins., c., fruiting.	3.50	30.00
LONICERA JAPONICA HALLIANA. Hall's Japanese Honeysuckle.		
Per 1000 Per 10,000		
Small lining-out	\$6.00	\$60.00
Medium lining-out	8.00	70.00
1-yr., tr., No. 1.	40.00	350.00
1-yr., tr., No. 2.	30.00	250.00
1-yr., tr., No. 3.	20.00	150.00
2-yr., tr., No. 1.	60.00	500.00
2-yr., tr., No. 2.	50.00	400.00
LONICERA SEMPERVIRENS. Scarlet Trumpet Honeysuckle.		

ing routine business, George Holsinger will present the secretary-treasurer's report and President Ralph Ricklefs will make his official address.

The afternoon session will be opened by an address, "An Outsider Looks at the Nursery Business," by Dr. J. E. Cannaday, State Fair Floral Co., Sedalia, Mo.

A symposium on modern trends in the selling of nursery stock will have as leaders, to discuss the various methods, the following: Salesmen—A. Williamson, Harrison Nursery Co., York, Neb.; sales yards—John Sarber, Sarber Nursery, Topeka, Kan.; radio and mail order—Paul Wilkinson, Henry Field Seed & Nursery Co., Shenandoah, Ia.; landscape—Charles W. Williams, Williams & Harvey Nurseries, Kansas City, Kan. Time will be allowed for free discussion by the members.

In the evening at 7:30 a special social meeting will be held in the Trianon room in recognition of the fiftieth anniversary of the association. A brief history of the organization will be given by George Holsinger, its secretary for many years. Reminiscences will be heard from George A. Marshall, Arlington, Neb.; Jim Parker, Tecumseh, Okla.; Thomas Rogers, Winfield, Kan.; William Weber, St. Louis, Mo., and others.

Friday morning, January 5, "Current Progress in American Association of Nurserymen Activities" will be the subject of an address by Richard P. White, Washington, D. C., executive secretary, A. A. N. A discussion of Mr. White's report will be given by Chet G. Marshall, Arlington, Neb., A. A. N. executive committee member, and by Charles A. Scott, Prairie Garden Nursery, McPherson, Kan. As many matters of general interest will be brought out in the report, a general discussion is expected.

Committee reports and the election of officers will conclude the meeting.

Provision has been made for trade exhibits, concerning which applicants should address the secretary, George Holsinger, Rosedale Station, Kansas City, Kan.

#### SET NEW YORK DATE.

At a meeting this week, the executive committee of the New York State Nurserymen's Association set the date of the annual meeting as Friday, January 12, at the Seneca hotel, Rochester, on the closing day of the meeting of the New York State Horticultural

Society, at Rochester, January 9 to 12.

Inasmuch as the meeting of the Illinois State Nurserymen's Association, at Chicago, closes the preceding day, it is suggested that easterners on their way home stop off at Rochester and enjoy a visit with the New York nurserymen and partake of the banquet, leaving afterward for home by Pullman.

#### PLAN ILLINOIS PROGRAM.

Plans for the twenty-fourth annual convention of the Illinois State Nurserymen's Association are maturing rapidly and a complete program will be announced at an early date.

The convention will be held at the Hotel La Salle, Chicago, January 9 to 11. The morning of the first day will be given over to registration, with the opening session at 2 p. m. There will be three general sessions of the convention, one each afternoon, with programs of general interest to all nurserymen, the session on the last day being preceded by a luncheon. There will also be morning sessions on the second and third days of the convention, the program at these sessions being confined to legislative and inspection problems and other matters of particular interest to Illinois nurserymen.

The list of speakers, not yet complete, and their subjects will include the following:

"The Growing Problem in Horticultural Nomenclature," by Dr. M. J. Dorsey, chief in pomology, department of horticulture, University of Illinois, Urbana.

"New Inspection Problems," by H. F. Seifert, chief plant inspector, Illinois department of agriculture, Glen Ellyn.

"The Nurserymen's National Interests," by Benjamin J. Greening, Monroe, Mich., member of executive committee of American Association of Nurserymen.

"Recent Amendments to the Social Security Laws," by John H. Doesberg, counsel, R. R. Donnelley & Sons Co., Chicago.

"You and Your Legislature," by J. E. Duffield, field secretary, Associated Employers of Illinois.

As in the past several years, the east exhibit hall on the mezzanine floor, which immediately adjoins the meeting room, will be used for commercial exhibits and as a lounge room and general meeting room.

Miles W. Bryant, Sec'y.

#### ANNOUNCE GEORGIA DATE.

Invitation to the Georgia State Nurserymen's Association meeting, at the Partridge Inn, Augusta, January 8, has been sent out by J. G. Barrow, secretary and treasurer, Atlanta, with the request that each member bring along a fellow nurseryman to help the



#### LET US GIVE YOU A LIFT ON THAT BIG TREE JOB

Trees weighing up to 12 tons moved faster and safer with our equipment. Use your own trucks for helpers in transporting the trees.

OTTO DAMGAARD, DES PLAINES, ILLINOIS



association. Vice-president James C. Bailie, of the Fruitland Nurseries, Augusta, and his local committee are planning a pleasant as well as profitable gathering.

It is hoped that Owen G. Wood, Bristol, Va., president of the American Association of Nurserymen, will bring a greeting and message from the national association.

Such matters as the proposed nurserymen's lien law and an invitation to the A. A. N. to hold its 1941 convention at Atlanta are to come up for consideration. Donald M. Hastings, Atlanta, is president of the organization.

### OKLAHOMA PROGRAM.

The program for the nineteenth annual convention of the Oklahoma State Nurserymen's Association, to be held at Oklahoma City, January 9 and 10, has been announced by Secretary J. A. Maddox. He states a larger crowd is expected than at previous meetings, and rooms are available at the Huckins hotel at no advance in prices, but reservations should be made early. Exhibitors are requested to make their plans known to Mr. Maddox soon, so that space may be allotted.

The first session will open at 9:30 a. m., January 9, with an invocation by W. T. Fain, Bethany. After the address of welcome by W. E. Rey and response by Jack Foote, Durant, the official address of the president, C. E. Stephens, Tulsa, will be followed by the secretary's report and committee reports. Then Richard P. White, Washington, D. C., secretary of the American Association of Nurserymen, will address the convention.

After luncheon, with C. C. Day as guest speaker, there will be a meeting of the Oklahoma A. A. N. chapter, at which Jim Parker will preside. Afternoon speakers will be Dr. K. Starr Chester, Oklahoma A. & M. College, Stillwater, and Dr. John Ratsek and A. J. Bostick, Tyler, Tex. Afternoon entertainment will be provided for the visiting ladies.

In the evening will be held the annual banquet, with C. E. Garce, Noble, as master of ceremonies.

The second day's sessions will open with a discussion by N. D. Woods of "A Printed Price List." Other morning speakers will be E. W. Johnson, of the great plains station; T. A. Milstead, Shawnee, on "Displaying Nursery Goods"; Leo Conard, Stigler, on

## NORTHERN-GROWN SEEDLINGS

Our quality nursery stock is all of our own growing. It is produced from seed collected in the northwest and is grown in a climate of variable extremes, which is a testimony to its hardiness.

Prices are F.O.B. Colton, boxing or baling additional at cost. Usual June 1 terms to nurserymen of established credit; otherwise cash, security or satisfactory references. 5% discount for cash with order. Orders received before February 1 subject to the following quantity discounts: \$100.00 to \$200.00, 5%; \$200.00 and up, 10%.

All grades and varieties can be furnished in quantity.

Caragana, Arborescens		Per 1000	Ulmus Pumila		Per 1000
6 to 12 ins.	.....	\$ 5.00	6 to 12 ins.	.....	\$ 2.50
12 to 18 ins.	.....	7.50	12 to 18 ins.	.....	4.50
18 to 24 ins.	.....	10.00	18 to 24 ins.	.....	7.00
2 to 3 ft.	.....	14.00	2 to 3 ft.	.....	10.00
Celtis Occidentalis			3 to 4 ft.	.....	15.00
2 to 3 ft.	.....	\$20.00	4 to 5 ft.	.....	25.00
3 to 4 ft.	.....	30.00	SHRUB SEEDLINGS GROWN IN ROWS		
4 to 5 ft.	.....	40.00	Buffalo Berry, silvery foliage		
Elaeagnus Angustifolia			2 to 3 ft.	.....	\$35.00
6 to 12 ins.	.....	\$ 5.00	3 to 4 ft.	.....	50.00
12 to 18 ins.	.....	8.00	Prunus Tomentosa (Nanking Cherry)		
18 to 24 ins.	.....	13.50	6 to 12 ins.	.....	\$15.00
2 to 3 ft.	.....	18.00	12 to 18 ins.	.....	25.00
3 to 4 ft.	.....	25.00	18 to 24 ins.	.....	35.00
Fraxinus Lanceolata			Rhamus Cathartica, cut back		
6 to 12 ins.	.....	\$ 2.50	12 to 18 ins.	.....	\$15.00
12 to 18 ins.	.....	4.00	18 to 24 ins.	.....	20.00
18 to 24 ins.	.....	6.00	2 to 3 ft.	.....	25.00
2 to 3 ft.	.....	9.00	ONE-YEAR FROM CUTTINGS		
3 to 4 ft.	.....	12.00	Populus, Northwest—whips		
Gleditsia Triacanthos Inermis			18 to 24 ins.	.....	\$12.50
6 to 12 ins.	.....	\$ 3.50	2 to 3 ft.	.....	15.00
12 to 18 ins.	.....	7.00	3 to 4 ft.	.....	20.00
18 to 24 ins.	.....	10.00	4 to 5 ft.	.....	25.00
2 to 3 ft.	.....	14.00	Salix, Niobe Weeping		
3 to 4 ft.	.....	20.00	2 to 3 ft.	.....	\$20.00
Ulmus Americana			3 to 4 ft.	.....	25.00
6 to 12 ins.	.....	\$ 2.50	4 to 5 ft.	.....	35.00
12 to 18 ins.	.....	4.50			
18 to 24 ins.	.....	7.00			
2 to 3 ft.	.....	10.00			

Delivery when wanted. Include shipping instructions. Samples sent upon request. Write for our Trade List.

## DYBVIG NURSERIES, INC.

Colton

South Dakota



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"PAINESVILLE NURSERIES"

85 Years in

Painesville, Ohio

### MIDWEST HEADQUARTERS FOR COMPLETE NURSERY SUPPLY

Fruit Trees  
Deciduous Trees  
Evergreen Trees  
Shrubs  
Vines

Small Fruits  
Roses  
Hardy Perennials  
Plants  
Seeds, Bulbs, Tubers

## FINEST LANDSCAPE STOCK

Covering all of the best shrubs and plants for the south. Also a half million of lining-out CAMELLIAS, AZALEAS AND GENERAL NURSERY STOCK.

Write for Price List.

## E. A. McILHENNY

Specialist in CAMELLIAS, AZALEAS, IRIS and HEMEROCALLIS  
AVERY ISLAND, LA.

"Value of Advertising," and Paul V. Baker, Enid, on "Value of Landscape Department."

In the afternoon the meeting will be addressed by Thomas B. Gordon, state nursery inspector, and by Dr. F. A. Fenton, Dr. Michel Afanasiev and Dr. Frank B. Cross, of Oklahoma A. & M. College, Stillwater.

Final business and the election of officers will close the meeting.

#### NEW ENGLAND REGIONAL.

The annual winter meeting of the New England Nurserymen's Association will be held January 30 and 31 and February 1, sandwiching in a meeting of members of the American Association of Nurserymen in the eastern region on the afternoon of the second day. For the convenience of those A. A. N. members in the region outside New England, it is planned to hold the gathering either at Bridgeport, Conn., or at New Haven, Conn., depending upon the hotel accommodations available.

While the program is still in course of preparation, plans have been made for the attendance of Owen G. Wood, Bristol, Va., A. A. N. president; Richard P. White, Washington, D. C., executive secretary, and Frank LaBar, Stroudsburg, Pa., executive committee member from the eastern region.

#### TO HOLD JOINT MEETING.

The Pennsylvania Nurserymen's Association will be host to the New Jersey Association of Nurserymen in their joint meeting at Philadelphia, January 25, returning the visit of the former association to Trenton last year.

Inasmuch as agricultural week occurs January 22 to 26 at Trenton, the New Jersey Association of Nurserymen will hold a business session at the Hotel Hildebrecht, in that city, at 10 a. m. January 24, and then adjourn in the afternoon to go to Philadelphia for a banquet that evening and the joint session on the following day with the Pennsylvania nurserymen, who meet in their state session January 24.

At a meeting of the Pennsylvania executive committee at Norristown last month, President Harold Seyler appointed William Long chairman of the arrangements committee, with

Albert F. Meehan and Eugene Mulder as members.

At the New Jersey business session, Col. C. C. Kahlert, who handles the nurserymen's as well as other agricultural advertising for the New Jersey Council, will present plans for the coming season's campaign.

Louis Schubert, chairman of the New Jersey committee on arrangements, is hopeful that a large group will visit Philadelphia for the event.

#### TENNESSEE SPEAKERS.

The convention of the Tennessee State Nurserymen's Association will be held at the Peabody hotel, Memphis, January 25 and 26. Features will be one afternoon spent under the supervision of the Memphis supervisor of parks and the showing of 500 feet of colored film made by Prof. G. M. Bentley on the trip to the A. A. N. convention at Portland, Ore., last July.

While the program has not yet been fully made up, the secretary announces the following speakers scheduled: Owen G. Wood, A. A. N. president, Bristol, Va.; A. N. Pratt, state horticulturist, Nashville; Richard P. White, A. A. N. executive secretary, Washington, D. C.; Henry B. Chase, president, Chase Nursery Co.,

Chase, Ala.; Joe Howell, Howell Nurseries, Knoxville; Louis Hillenmeyer, Hillenmeyer Nurseries, Lexington, Ky.; William N. Pouder, Taxpayers' Association, Nashville; C. C. Flanery, commissioner of agriculture, Nashville; David Cartwright, Cartwright Nurseries, Memphis; L. A. Niven, horticultural editor, Progressive Farmer, Memphis; Hubert Fisher, Fisher Flowers, Germantown, Tenn.; Mrs. B. K. Bright, Blueview Rock Gardens, Kingsport, Tenn., and Richard Jones, Jones Ornamental Nursery, Nashville.

The officers of the association are: President, A. J. Byrn, Byrn Landscape Service, Dickson; vice-president, David Cartwright, Memphis, and secretary-treasurer, G. M. Bentley, state entomologist and plant pathologist, Knoxville.

#### JERSEY SHORT COURSE.

The second annual short course for nurserymen will be held at Rutgers University, New Brunswick, N. J., during the week beginning February 5.

Guest speakers will be Dr. L. C. Chadwick, of Ohio State University,

#### SHADE TREES

	Per 10	Per 100
Ash, American	\$10.00	\$90.00
10 to 12 ft.		
2 to 2 1/4 -in. cal.	15.00	140.00
2 1/4 to 3 -in. cal.	20.00	185.00
Elm, American		
10 to 12 ft.	6.50	60.00
2 to 2 1/4 -in. cal.	12.50	115.00
2 1/4 to 3 -in. cal.	20.00	175.00
Elm, Chinese		
8 to 10 ft.	10.00	95.00
10 to 12 ft.	12.50	115.00
Flowering Crab (assorted varieties)		
2 to 4 ft.	4.00	40.00
4 to 6 ft.	6.00	50.00
Maple, Norway		
10 to 12 ft.	10.00	90.00
2 1/4 to 3 -in. cal.	12.50	115.00
2 to 2 1/4 -in. cal.	12.50	165.00
2 1/4 to 3 -in. cal.	22.50	200.00
3 to 3 1/4 -in. cal.	30.00	275.00
Oak, Pin		
2 1/4 to 3 -in. cal.	10.50	150.00
2 to 2 1/4 -in. cal.	20.00	185.00
2 1/4 to 3 -in. cal.	30.00	275.00
Poplar, Lombardy		
8 to 6 ft.	1.80	16.00
6 to 8 ft.	2.00	18.00
8 to 10 ft.	3.00	22.50
10 to 12 ft.	4.50	35.00
Specimen Apple Trees		
7 to 8 ft.	12.50	100.00
Willow, Weeping		
6 to 8 ft.	6.00	50.00
8 to 10 ft.	8.50	75.00

—Waynesboro Nurseries, Inc., Waynesboro, Va.—

## NOVELTIES

#### Latest European Introductions

**NEW PERENNIALS:** Asters, Astilbes, Campanulas, Gypsophila, Kniphofia, Peonies, Phlox, Poppies, etc.

**RARE SHRUBS:** Acer, Barberries, Heathers, Lilacs, Magnolias, etc.

**CHOICE AZALEAS AND RHODODENDRONS:** Large-flowering, Japanese Azaleas, Yellow Rhododendrons, etc.

Ask for copy of "Special Trade Offer"

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Who offers the nursery trade of this country the greatest line of rare trees and shrubs?

Write for list 3940 and find out!

But use your business stationery, as post cards will be ignored.

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#### MODERATE PRICES

**RHODODENDRON HYBRIDS.** Grafted, hardy varieties only.

**AZALEA KAEHPFRI HYBRIDS.** Named varieties, the hardest of all Azaleas for landscape work.

**KOSTER'S BLUE SPRUCE.** Perfectly shaped; transplanted.

**EUROPEAN BEECH,** fine specimen. Also fastigiata, pendula, Riversii.

#### BAGATELLE NURSERY

P. O. Huntington Station, L. I., N. Y.

Ask for catalogue P. M. Koster, Mgr.

**GRAFTED PLANTS**

for spring delivery

Shipped from 2½-in. pots, about May 1. Earlier delivery if desired for southern or far western planting.

	Per 10	Per 100
<i>Acer palmatum</i> Ashi-Beni	\$3.50	\$30.00
<i>palmatum atropurpureum</i>	3.00	25.00
<i>dissectum atropurpureum</i>	3.00	25.00
<i>Cedrus atlantica</i> glauca	4.00	35.00
<i>Chamaecyparis obtusa</i> gracilis nana		
compacta	3.00	25.00
<i>Cornus florida</i> alba plena	3.00	25.00
<i>florida pendula</i>	3.00	25.00
<i>florida rubra</i>	3.00	25.00
<i>florida Welchii</i>	3.00	25.00
<i>Fagus sylvatica</i> pendula	3.00	25.00
<i>syriaca</i> Riversii	3.00	25.00
<i>syriaca</i> brieuxii	3.75	35.00
<i>Ilex opaca</i> femina	2.75	25.00
<i>opaca</i> Howardii	2.75	25.00
<i>Juniperus columnaris</i> glauca	2.75	25.00
<i>columnaris</i> viridis	2.75	25.00
<i>chinensis</i> sargentii	2.75	25.00
<i>chinensis</i> Sargentii glauca	2.75	25.00
<i>concolorum</i> glauca	2.75	25.00
<i>squamata</i>	2.75	25.00
<i>squamata argentea</i> variegata	2.75	25.00
<i>squamata</i> Meyerii	2.75	25.00
<i>virginiana</i> Burkii	2.75	25.00
<i>virginiana</i> Caneritii	2.75	25.00
<i>virginiana</i> elegantissima	2.75	25.00
<i>virginiana</i> glauca	2.75	25.00
<i>virginiana</i> glauca	2.75	25.00
<i>virginiana</i> Katsurii	2.75	25.00
<i>virginiana</i> Koeleri	2.75	25.00
<i>virginiana</i> Schottii	2.75	25.00
<i>virginiana</i> pendula	2.75	25.00
<i>virginiana</i> pyramidiformis	2.75	25.00
<i>Magnolia Alexandrina</i>	3.25	30.00
<i>Nailiana</i> staltia	3.25	30.00
Lamel	3.25	30.00
Soulangiana	3.25	30.00
Soulangiana nigra	3.25	30.00
<i>Thuja occidentalis</i> Douglasii spiralis	2.25	20.00
<i>occidentalis</i> elegantissima	2.25	20.00
<i>occidentalis</i> lutea Gen. Peabody	2.25	20.00
<i>occidentalis</i> lutea B. & A. Type	2.25	20.00
<i>occidentalis</i> nigra	2.25	20.00
<i>occidentalis</i> Rooseveltii	2.25	20.00
<i>occidentalis</i> Wariana (sibirica)	2.25	20.00
<i>occidentalis</i> aurea nana	2.00	18.00
<i>occidentalis</i> omopsea	2.00	18.00
<i>occidentalis</i> elegantissima	2.00	18.00
<i>Tsuga canadensis</i> Sargentii	2.75	25.00

You may deduct 10% from these prices if you place your order before Jan. 1, 1940.

**HESS' NURSERIES**

Mountain View, NEW JERSEY

**Norway Maple Whips**

	Per case
100 Whips, 6 to 6 ft.	\$40.00
200 Whips, 6 to 6 ft.	75.00
100 Whips, 6 to 7 ft.	80.00

**Schwedleri Maple Whips**

	Per Case
50 Whips, 6 to 6 ft.	\$32.50
50 Whips, 6 to 7 ft.	37.50

Packed F.O.B. Dresher, Pa.  
Send for complete list of Lining-out Stock.

**THOMAS B. MEEHAN CO.**

DRESHER, PA.

**VIBURNUM BURKWOODII**

NEW - SCARCE - HARDY

Most striking improvement in flowering shrubs in many years—fragrant pink and white flowers.

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DAYTON, OHIO

Taking Orders for **STANDARD ROSES** and Other Stock from **CALIFORNIA**

**ARTHUR DUMMETT**

61 W. Grand St., Mount Vernon, N. Y.

who will discuss a selected list of evergreens and the fertilization of nursery stock, and Dr. R. C. Allen, of Cornell University, who will talk on better varieties of perennials and their culture.

The remaining speakers are from the staff of the New Jersey agricultural experiment station and the college of agriculture, including Dr. S. A. Waksman, on American peat mosses; Dr. J. S. Joffe, on "New Knowledge about Soils"; Donald M. Goss, on "Controlling Soil Reactions"; Prof. E. R. Gross, on "Drainage Problems in the Nursery"; Dr. J. W. Shive, on "Nutrition of Plants"; Ben Blackburn, on native trees in landscape planting and uses for herbaceous perennials; Dr. H. B. Sprague, on "Essentials of Lawn Care"; Prof. Richard B. Farnham, on selling perennials at a profit; Prof. Henry M. Biekart, on "Recent Developments in Plant Propagation"; Prof. M. A. Blake, on "Some Tree Responses to Environment"; Dr. C. C. Hamilton, on insect pests, and Dr. P. P. Pirone, on plant diseases.

Fred W. Jackson, of the state department of agriculture, will discuss the state campaign for advertising nursery stock.

Further details of the program and application blanks will be available shortly, and early registration is desirable because not more than 100 persons can be accommodated.

**SCIENTISTS TO MEET.**

The American Society for Horticultural Science will hold its thirty-sixth annual meeting at Ohio State University, Columbus, December 28 to 30. The list of papers to be presented and those to be read if called for fills thirty-six pages of the program booklet just issued.

December 28, the morning session will be held in three sections, devoted respectively to the nutrition of fruit trees, breeding of horticultural plants and vegetable crops. The afternoon session will be held in four sections, devoted to pomology, breeding of orchard crops, vegetable crops and soil management and fertilizers for ornamental plants.

December 29, the morning session will be held in five sections, devoted to methods of horticultural research, rootstocks and propagation of fruit trees, small fruits, soil management

**SEEDS 1939 CROP**

NOW READY FOR DELIVERY

Prices F. o. b. New York

	4 lb.	1 lb.
<i>Acer platanoides</i> , Norway Maple	\$0.40	\$1.25
" <i>spicatum</i> , Mountain Maple	1.00	3.50
<i>Amelanchier stolonifera</i> , Running Shadblow, d.b.	.75	2.50
<i>Aristolochia tomentosa</i>	.55	1.85
<i>Benzoin</i> <i>orientalis</i> , Spicebush	.45	1.50
<i>Berberis thunbergii</i> , Japanese Barberry, c. s.	.75	2.50
" <i>thunbergii</i> <i>atropurpurea</i> , c. s.		
1000 seeds, \$1.00	5.00	16.00
<i>Betula lutea</i> , Yellow Birch, c. s.	1.65	6.00
" <i>nigra</i> , River Birch, c. s.	.50	1.80
" <i>papyrifera</i> , Canoe Birch	.45	1.50
<i>Bignonia radicans</i> , Trumpet creeper	.65	2.25
<i>Calycanthus floridus</i> , Common Sweetshrub, Northern seed	.50	1.65
<i>Catalpa speciosa</i> , Western Catalpa	.35	1.10
<i>Celtis mississippiensis</i> , Sugarberry, d. b.	.55	1.90
" <i>occidentalis</i> , Hackberry, d. b.	.45	1.60
<i>Cercis canadensis</i> , American Redbud	.55	1.85
<i>Clematis texensis</i> , Scarlet Clematis, c. s., ¼ oz., \$0.75		
<i>Cornus alba</i> <i>sibirica</i> , Coral Dogwood, c. s.	.75	2.50
" <i>alternifolia</i> , Paeoda Dogwood, c. s.	.60	2.10
" <i>canadensis</i> , Bunchberry, d. b.	1.05	3.75
" <i>florida</i> , Flowering Dogwood, c. s.	.30	.90
" <i>stolonifera</i> , Red Osier Dogwood, c. s.	.60	2.10
<i>Corylus americana</i> , American Hazzelnut	.30	.85
<i>Cupressus arizonica</i> , Arizona Cypress (genuine)	.90	3.25
<i>Cydonia japonica</i> , Flowering Quince, c. s.	.90	3.25
<i>Daphne mesereum</i> , February Daphne	1.35	4.80
<i>Fraxinus americana</i> , White Ash	.25	.75
" <i>lanceolata</i> , Green Ash	.25	.75
<i>Halesia tetrapetala</i> , Great Silverbell	.35	1.25
<i>Juniperus virginiana</i> , Red Cedar, d. b., Northern	.45	1.50
" <i>virginiana</i> , Red Cedar, d. b., Platte River	.35	1.25
<i>Kalmia angustifolia</i> , Lambkill, c. s., \$1.50		
<i>Laurocerasus caroliniana</i> , Carolina Cherry-laurel	.35	1.25
<i>Liriodendron tulipifera</i> , Tulip Tree	.25	.75
<i>Magnolia fraseri</i> , Fraser Magnolia, c. s.	1.40	5.00
" <i>glauca</i> , Sweetbay	.70	2.50
" <i>tripetala</i> , Umbrella Magnolia	.50	1.75
<i>Malus baccata</i> , Siberian Crab, c. s.	1.70	5.75
" <i>coronaria</i> , Wild Sweet Crab, c. s.	1.25	4.50
<i>Morus rubra</i> , Red Mulberry, c. s.	1.10	4.00
<i>Picea excelsa</i> , Norway Spruce	.55	1.75
" <i>glauca</i> <i>albertiana</i> , Black Hills Spruce	1.45	5.50
" <i>pungens</i> , Colorado Spruce	1.25	4.50
<i>Pinus attenuata</i> , Knobcone Pine	1.55	5.50
" <i>ponderosa</i> , Western Yellow Pine	.50	1.65
" <i>rigida</i> , Pitch Pine	.70	2.25
" <i>strobus</i> , White Pine	.55	1.75
<i>Populus nigra</i> <i>italica</i> , Lombardy Poplar	.45	1.25
" <i>tremula</i> , European Aspen	.55	1.75
<i>Prunus besseyi</i> , Bessey Cherry, c. s.	.80	2.50
" <i>cerasifera</i> , Myrobalan Plum	.25	.75
" <i>padua</i> , European Bird Cherry, c. s.	.55	1.75
" <i>pumila</i> , Sand Cherry, c. s.	.65	2.25
" <i>virginiana</i> , Common Choke-cherry, c. s.	.55	1.85
<i>Quercus alba</i> , White Oak	.18	
" <i>coccinea</i> , Scarlet Oak	.22	
" <i>rubra</i>	.30	
<i>Rhamnus frangula</i> , Glossy Buckthorn, c. s.	.50	1.45
<i>Rhododendron catawbiense</i> , Catawba Rhododendron, c. s.		
os., \$0.50		
" <i>Cunninghamii</i> , c. s., ¼ oz., \$1.00		
<i>Rosa blanda</i> , Meadow Rose, dried hips	.55	1.75
<i>Sambucus cuneata</i> , Blueberry Elder, d. b.	.90	3.25
<i>Sequoia sempervirens</i> , Redwood, Genuine Calif. seed	1.00	3.50
<i>Styrax americana</i> , Snowbell	.55	1.70
<i>Thuja orientalis</i> <i>aurea</i> <i>conspicua</i> , Goldspire Arbor-vitae	.90	3.00
<i>Viburnum acerifolium</i> , Maplesleaf		
" <i>Viburnum</i> , d. b.	.40	1.25
" <i>casinoides</i> , Withe-rod, d. b.	.55	1.70
" <i>lentago</i> , Nannyberry, d. b.	.55	1.75
<i>Vitis vulpina</i> , Riverbank Grape, d. b.	.80	2.75

Also a good list of perennials.

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and fertilizers for vegetable crops, and floriculture and ornamental horticulture. The afternoon session will be held jointly with the American Society of Plant Physiology, with a symposium on the effect of temperature on absorption, growth and reproduction of plants. Later in the afternoon will be held a conference on the deciduous fruit situation in relation to pomological research.

December 30, the morning session will be held in four sections, on physiology of fruit trees, storage processing and utilization of horticultural crops, culture of the tomato and joint session of floriculture and ornamental horticulture section with the American Phytopathological Society. The afternoon session will include business and a joint session with foresters on tree topics.

The southern section of the American Society for Horticultural Science will hold its meeting at Birmingham, Ala., February 7 to 9.

#### FIRE AT MONROE, MICH.

Fire of undetermined origin, November 24, destroyed a wooden barn, pump house, steel corncrib and farm implements belonging to the Greening Nursery Co., Monroe, Mich. Fifteen cows, two calves, six horses and 500 bushels of oats also were destroyed. The loss was estimated at \$7,500.

**WILLIAM KLOTTER**, of the Klotter Nursery Co., Cincinnati, O., has purchased a new home on the Cincinnati-Louisville road in Green township. A large lake is on the property.

**RETURNING** from a month's sales trip through the southern states, W. J. Smart, of the D. Hill Nursery Co., Dundee, Ill., states that the reports of his customers as to business were quite favorable. L. L. Kumlien, of this company, is vacationing at Hollywood Beach, Fla., after a visit to Cuba.

**THE Houlihan Nursery Co.**, St. Louis, Mo., recently opened display grounds on Chippewa boulevard, facing the new St. Louis Hills residential district, in the south end. The planted display in front of the sales office attracted many buyers, and the fine planting weather kept the sales force busy.

## Oppose Trade Barriers

#### STARK RECEIVES AWARD.

Coöperation of agricultural and business interests with the federal and state governments in a drive to eliminate the growing evil of interstate trade barriers was urged by Governor Lloyd C. Stark, of Missouri, in accepting the third annual award of the National Association of Accredited Publicity Directors for the most outstanding achievement in publicity in the United States during the past year.

The award was presented Governor Stark at the association's annual dinner, December 11, at New York, for his campaign against state trade barriers as president of the Council of State Governments and chairman of the Governors' Conference.

Besides creating greater interchange of commerce between the forty-eight states, the peaceful dissolution of trade barriers might possibly serve as a model to warring European nations who are "trying to batter down trade spite fences with the butts of rifles," Governor Stark declared.

"May it not be our destiny that, in working out our own problem of de-Balkanizing the United States, we may again cast a peace pattern for a war-weary world?" he suggested.

He asserted that there was no condition in the nation today that was more in need of "publicity spotlighting" than the establishment of trade barriers between the states. Such legislation in any state, he said, was "simply a favorite-son law designed to favor a few citizens of that particular

state over the citizens of forty-seven other sister states."

"For every law written by a state to discriminate against the free competition of citizens from other states, there will be forty-seven retaliatory laws. That process has been going on and it is an endless, vicious circle. That no one is permanently benefited must be obvious."

Speaking at the dinner on behalf of business, W. Gibson Carey, Jr., president of the Chamber of Commerce of the United States, pledged support of businessmen throughout the country to fight for the elimination of state trade barriers. His organization, he said, was wholeheartedly opposed to trade barriers between the states which tended to break the national market into smaller units.

B. J.

#### FIGHT STATE TRADE BARS.

Enlistment of large consumer organizations in its program for elimination of interstate trade barriers was urged upon the interdepartmental committee studying this problem at its first meeting, at Washington, D. C., December 6, by Don A. Montgomery, consumers' counsel, Department of Agriculture.

Coincident with the interdepartmental committee meeting, the Work Projects Administration announced that an analysis of statutes impeding the free flow of commerce between nine eastern and southern states will be completed by its marketing laws

#### ROSES - CALIFORNIA GROWN

H. T. - H. P. - Polyantha  
Climbers - Rugosas

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Complete Assortments

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"One of America's Foremost Nurseries"

The Best in Native  
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**Rhododendrons**

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**LaBar's Rhododendron Nursery**  
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Carloads or truckloads only.

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We specialize in  
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Strawberry, Asparagus, Raspberry and  
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OUR MANY YEARS' PRODUCTION  
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FAVORABLE LOCATION ENABLES  
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PRECIATE.

Submit your definite list for quota-  
tions.

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**DUTCH PIPE  
BOSTON IVY  
BALTIMORE IVY**

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California Privet, Hydrangea P. G.

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JAPANESE MAPLE—TRUE GRAFTED  
9 to 12 ins., 1-yr., field, tpi. .... \$225.00 per 1000  
**AZALEA MOLLIS**  
4 to 6 ins., 1-yr., tpi., beds. .... 60.00 per 1000  
6 to 9 ins., 2-yr., tpi., beds. .... 80.00 per 1000  
8 to 12 ins., 3-yr., extra heavy,  
tpi., beds. .... 120.00 per 1000

BRIDGETON, N. J. Write for catalogue.

survey before the convening of state legislatures in January.

The interdepartmental committee discussed a three-way approach to presenting testimony during hearings to be sought before the temporary national economic committee early next year on elimination of existing state trade barriers at its executive meeting, according to reports from Department of Commerce officials.

The tree types of possible testimony to be offered to the "monopoly committee" on the trade barrier problem discussed were listed as follows: Presentation of the historical background of interstate trade regulations, survey of constitutionality of such regulations, and citation of specific examples of restricting barriers and calling of individual witnesses affected by the legislation.

### STRAWBERRY CENSUS.

More than half of the 1934 strawberry crop of the United States was produced in fifty leading counties, according to the last census of the United States Department of Commerce.

Of the fifty counties, Tangipahoa parish, La., led all other strawberry-producing counties with 12,454,686 quarts from 12,461 acres. White county, Ark., ranked second with 10,327,214 quarts from 10,556 acres. Nine of the fifty leading counties were in Tennessee, five in Arkansas, four each in Florida, Missouri and Oregon, three each in Louisiana, Maryland, North Carolina and Virginia and two each in California, Kentucky and Michigan.

### ON RADIO PROGRAMS.

The Radio Garden Club broadcasts, heard at 11:45 a.m. each Friday over WOR and other stations of the Mutual broadcasting system, will feature G. G. Nearing, Ridge-wood, N. J., December 22, who will talk about holly, and Montague Free, horticulturist of the Brooklyn Botanic Garden, who will talk on boxwood, December 29.

WILLIAM F. ALLEN, head of W. F. Allen Co., strawberry and small fruit grower, Salisbury, Md., was recently elected president of the Salisbury bank and a vice-president of the County Trust Co. of Maryland, of which the Salisbury bank is a subsidiary.

## TREES

We have a fine assortment of excellent trees for Landscape, Parks or Street Planting.

Pin Oaks, Red Oaks, Honey Locusts  
Sugar Maples, Sweet Gums  
European Lindens, Hemlocks and  
Pines

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It would be to your interest to have our new trade list which will be mailed on request. For large quantities mail us list for Special Letter Prices.

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**PRINCETON NURSERIES**  
of PRINCETON, N. J.

**SUPERIOR**

**Hardy Ornamentals**

# Eastern Canada Meeting

*Consider War Problems and Elect Officers  
at Annual Gathering Held at Toronto*

The annual meeting of the Eastern Canada Nurserymen's Association was held at the Royal York hotel, Toronto, November 9, with an attendance of twenty members, representing a dozen firms, and, by invitation, four department of agriculture representatives.

In an address on nursery imports into Canada, L. S. McLaine, chief of plant production services, Ottawa, gave figures to show the great curtailment of nursery stock imports during the World war, though there was no prohibition, such as has been made by Great Britain because of the present war and to some degree by import licenses by other European nations. Nursery stock imports shrank from a value of \$612,695 in 1914 to the low figure of \$303,586 in 1919. From there they rose to a peak figure of \$1,289,300 in 1928.

Col. R. L. Wheeler, assistant director of marketing in the Dominion department of agriculture, Ottawa, reviewed the position of the Canadian fruit growers, which is not favorable on account of the extreme limitations of exports, in spite of the steps taken by the Dominion authorities to promote the domestic consumption of the apple crop in particular.

Progress toward organization of the proposed Royal Canadian Horticultural Society was reported by Major John A. Connon.

## President's Address.

President E. B. Luke in his remarks stated in part as follows:

"We are meeting under extraordinary conditions. The way out is not clear. I have no solution to offer. It seems to me that, meantime, until developments occur, our policy should be to carry on to the best of our ability and to keep our eyes and our minds open.

"Psychologists and psychiatrists tell us that the average individual devotes about 25 per cent of his God-given mental powers and permits the remaining 75 per cent to continue in a state of innocuous desuetude, in other words, a howling wilderness. This, notwithstanding the fact that

we refer to ourselves as homo sapiens, man full of knowledge.

"I think we shall have to raise the percentage of development of our mental powers if we are going to carry on satisfactorily, for we do not belong among the governmental pets. There is no \$100,000 appropriation for helping us to move our crop; there is no appropriation for taking up that part of it that we cannot sell, but, unfortunately, in various provinces, there is an appropriation, or an expense, that you and I help pay for, not to help our industry, but to compete with us for business.

"I understand that in the province of Quebec our agricultural department carries a staff of 600, many of whom are actively canvassing for orders.

"Naturally, when the war broke out, we went back over our records from 1914 to 1919, inclusive, in our own company. They were rather encouraging. We came through the five years a little to the good, but I must say that our experience thus far, during the two months since war was declared, has been by no means so encouraging. While, as stated before, I can offer no leads or suggestions as to what we should do other than stick to our knitting meantime, I can, I think at least from my own experience, suggest one thing that we should not do, and that is, to go ahead with the foolish idea that we can get business by slashing prices and selling below cost. It seems to me it is better to sell a part of one's output at a reasonable profit than to sell most of it at cost or less."

Officers were elected as follows: Honorary president, Sen. E. D. Smith; president, E. B. Luke; vice-president, H. B. Dunnington-Grubb. Directors elected were H. C. Downham, Fred Davidson and Major John A. Connon. Mr. Luke was elected representative on the Horticultural Council, and Major Connon representative on the Royal Canadian Horticultural Society. L. F. Burrows was appointed secretary-treasurer.

Chairmen of committees are: Tariff, S. D. McConnell; unfair competition, H. B. Dunnington-Grubb; price spreads, Leon Smith; highway planting, Harry Endean.

## Those Present.

Those in attendance were:

E. B. Luke, Luke Bros., Montreal, Que.  
John A. Connon, Waterdown, Ont.  
S. D. McConnell, McConnell Nurseries, Port Burwell, Ont.  
Leon Smith, Arthur Gilbey and E. D. Smith, E. D. Smith & Sons, Winona, Ont.  
A. E. Brown, H. B. Dunnington-Grubb, J. V. Deussou and K. F. Stenson, Sheridan Nurseries, Sheridan, Ont.  
Kenneth McDonald and S. E. McDonald, Kenneth McDonald & Sons, Ottawa, Ont.  
W. B. Wellington, Stone & Wellington, Toronto, Ont.  
F. E. Davidson, Wellington & Davidson, Fonthill, Ont.  
E. S. Wellington, Pelham Nurseries, Toronto, Ont.  
E. C. Fowler and N. J. Scott, Brookdale Kingsway, Toronto, Ont.  
H. Endean, Endean Nursery, Ltd., Richmond Hill, Ont.  
F. Davidson, Davidson Nurseries, Burlington, Ont.  
L. F. Burrows, Ottawa, Ont.  
L. S. McLaine, M. B. Davis and R. L. Wheeler, department of agriculture, Ottawa.  
J. A. Carroll, department of agriculture, Toronto.

AT a special meeting of the North Jersey Metropolitan Nurserymen's Association, November 29, in the county administration building, Paterson, N. J., motion pictures on soil and a talk on fertilizers were given.

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*Large growers of Washington and Oregon-grown*

**Apple, Mahaleb, Mazzard, Myrobalan  
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SHADE TREES - EVERGREENS  
PERENNIALS ROSES

FRUITS (including the famous  
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Veteran, etc.)

Send us your want list or write for  
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Canada's Greatest Nurseries  
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**PIN OAKS, ELMS, SUGAR MAPLES**  
up to 3-inch caliper.

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up to 4-inch caliper.

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APPLE - PEACH - CHERRY - PEAR

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SHRUBS - *Pyracantha Lalandii*  
up to 3 to 4 feet.

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MONROE, MICHIGAN  
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*Caragana Arborea*, transplants only.

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## MEET AT COLUMBUS.

The November meeting of the Columbus Landscape Association was held at the home of Bret Slemmons, Columbus, O., where dinner was served. The members agreed to co-operate with the junior chamber of commerce for the proposed civic improvement plan. For each type of improvement one man from the landscape association would act as an advisor for the junior chamber of commerce. At present, plans are being formulated, but no direct action is expected. If action crystallizes, co-operation will be accomplished by contributions from nurserymen's stock.

J. W. Baringer, of the state department of agriculture, explained further the provisions of the new plant pest law as applied to landscape planters and nurserymen. Landscape men must have a dealers' license. Trees bought by landscape men or nurserymen for landscape purposes from farmers, etc., must be inspected. Farmers making such a sale will not be required to have a license, as this sale would be classified as casual. It was voted to start enforcing the law on the expected mushroom stands of Christmas trees.

Star Windsor talked on the Christmas tree business. His first year in business, with a 165 per cent markup, resulted in a net loss. Trees in bushel baskets are preferable to tubbed trees, as a greater spread of roots is obtained and chances of the trees' living after planting outdoors are greater. Balled and burlapped material should be thoroughly soaked before sales are made to ensure longer life.

Two reels of technicolor movies entitled "Tulip Time at the Fair" were shown.

The next meeting will be a Christmas party.

## DEWS APPOINTED INSPECTOR.

The appointment of J. Rees Dews, of the Chickasha Greenhouse, Chickasha, Okla., as a deputy inspector in the nursery division of the state department of agriculture, has been announced by Joe C. Scott, president of the Oklahoma state board of agriculture. Mr. Dews will maintain his residence in Chickasha and his partnership in the Chickasha Greenhouse.

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### Spreading Yew

Improved dark green strain.  
Best for sun or shade, founda-  
tion plantings and hedges.

2½ to 5 feet

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	Per 1000
<i>Callicarpa Americana</i>	\$0.90
<i>Cornus Stolonifera</i>	.75
<i>Deutzia Crenata</i>	.90
<i>Hydrangea Arborescens</i>	.80
<i>North Privet</i>	1.00
<i>California Privet</i>	1.00
<i>Lonicera Fragrantissima</i>	1.25
<i>Philadelphus Coronarius</i>	1.00
<i>Spiraea Callosa</i>	.75

This offer is for 15 days only.

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EVERGREEN SPECIALISTS  
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## EVERGREENS

For Seventy-five Years  
Growers of Quality Evergreens  
Lining-out Stock a Specialty  
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**EVERGREEN NURSERY CO.**  
Established 1864 STURGEON BAY, WIS.

# Shade Tree Meeting

*Nurserymen on Program and in Attendance  
at Annual Session of New Jersey Officials*

About 125 shade tree commissioners, commercial arborists, nurserymen and scientific men attended the fourteenth annual meeting of the New Jersey Federation of Shade Tree Commissions, November 28, at the Log Cabin, on the horticultural farm of the New Jersey agricultural experiment station, New Brunswick. The Log Cabin was jammed to capacity by an enrollment which exceeded by nearly fifty per cent the previous high record. The large turnout was no doubt due to the splendid program arranged by Philip Alden, secretary; N. T. Kessler, of the state conservation department; Lawrence Young, Essex county shade tree commissioner, and Dr. P. P. Pirone, research specialist at the station. Representatives from Delaware, Pennsylvania, New York and Connecticut were also present.

Dr. William H. Martin, director of the station, introduced by President Huttonlock, welcomed the group and discussed some of the fiscal problems facing the experiment station.

Prof. M. A. Blake, head of the department of horticulture, showed in an illustrated lecture how the environment played an important part in the successful growing of shade and fruit trees. "Tree men must keep in mind that soil type, drainage and rainfall largely govern what tree will thrive in any particular locality," he said.

The latest findings on the new and widespread fungous disease of planes were presented by Dr. J. M. Walter, of the United States Department of Agriculture. One of Dr. Walter's most important discoveries, proved both by experiment and field observations, is that the fungus can be spread from diseased to healthy trees by means of pruning tools. His tests have shown that pruning tools sterilized with alcohol will not carry any fungous tissue and thus reduce the chances of spreading the fungus.

Dr. P. P. Pirone called attention to the more prevalent diseases of shade and ornamental trees present in New Jersey during 1939. Among those he discussed were a new disease on Norway maples, leaf mottle of American beech and chlorosis of

pin oak. Dr. Pirone also pointed out that the dry 1939 season was responsible for many tree troubles and that the effects of this year's drought would be evident in a large number of cases next year.

Winston E. Parker, landscape forester of Moorestown, presented an excellent paper on practical problems involved in line clearance. He outlined three methods of overcoming the friction between shade tree men and public utilities in the problems which arise from the proper care of trees in the vicinity of telephone and electric lines. Several representatives of public utilities attended the meeting primarily to hear Mr. Parker's views.

After luncheon, Prof. Howard Sprague, authority on lawn problems at the station, discussed means of growing good sod under trees. "Norway maples and good lawns are not compatible unless something is done about it. Grass under trees should receive treatment as good as or better than that growing in open areas," he

said. "Only shade-tolerant grasses should be grown under trees, and the grass should be cut no shorter than one and one-half inches," he stated.

An excellently illustrated talk on broad-leaved evergreens was presented by John Jennings, of F. & F. Nurseries, Springfield. Mr. Jennings first outlined the cultural requirements of ericaceous plants and then proceeded to show how these plants can be used in tree plantings. "Rhododendrons and shade trees grow hand in hand with mutual benefit to both parties," said Mr. Jennings.

Dr. C. C. Hamilton, associate entomologist at the station, discussed new things in insecticides.

Dr. Curtis May, of the United States Department of Agriculture, projected a motion-picture film recently made at the Dutch elm disease laboratory showing the movement of injected particles in the sap stream of elms. The picture gave the tree men a new slant on what happens inside the tree.

At a round-table discussion on shade tree gadgets, several of the men told about short cuts and money-saving ideas of their own in dealing with certain phases of tree problems.

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"Dr. Chadwick's list is truly excellent. The sources of supply appended is very good, indeed."—Donald Wyman, Horticulturist, Arnold Arboretum.

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Selection of Superior Varieties of  
Woody Deciduous Ornamental Plants

By L. C. Chadwick

Describes and discusses the best plants among trees and shrubs in various sizes, vines and ground covers.

Lists uses, culture, characteristics, growth habits to make easy selection of suitable varieties for various landscape purposes.

Sources of supply of selected plants indicated in key list of 68 nurseries.

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508 South Dearborn St., Chicago, Ill.

Enclosed is remittance for \_\_\_\_\_ copies of the book,

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Latham — Chief  
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Indian Summer Everbearing

**RED LAKE CURRANT****MACDONALD RHUBARB****MANCHURIAN CRAB** Under-Stocks**ANDREWS NURSERY**

Faribault, Minn.

*If it's new for  
the Northwest, we have it!*

In quantity, we grow:

New Red Lake Currant  
McDonald and Ruby Rhubarb  
Cornus Elegantissima  
Cotoneaster Acutifolia  
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Minnesota Fruit Breeding  
Farm originations

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**GRAPE CUTTINGS**

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**Wholesale Growers of**

Grapes, Currants, Gooseberries,  
Blackberries and Raspberries  
Let us quote on your requirements

**FOSTER NURSERY COMPANY, INC.**

69 Orchard St. Fredonia, N. Y.

GRAPE VINES, CURRANTS, GOOSE-  
BERRIES and BERRY PLANTS.  
Growing for the wholesale trade since  
1890. The quality of our plants will  
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**SMALL FRUIT PLANTS**

Evergreens—Shrubs  
Lining-out Stock

Send for Complete Trade List

**SCARFF'S NURSERIES**

New Carlisle, O.

**Grape Cuttings and Vines**

A specialty on new varieties. Get our prices before buying.

**INDEPENDENT FRUIT CO.**

Penn Yan, N. Y.

**CHINESE ELMS**

750,000 true-to-type trees

4 to 6 ft., 6 to 8 ft., 7 to 10 ft., etc.

Write for prices.

**WEAVER FLORIST & NURSERY CO.**

Lamesa, Tex.

meeting was the reflection of the officers: President, Ralph Hutton-lock, Montclair; vice-president, Carl Witte, Essex county park system; secretary, Philip Alden, of the Kearny shade tree commission. Also reflected were the following members of the board of directors: Winston Parker, Moorestown; James Walker, Newark shade tree commission; Henry Leuning, Ridgewood shade tree commission; William McIntyre, Morristown.

The group then moved to the Roger Smith hotel, where Dr. Joseph W. Vansant, of Pennsylvania, presented motion pictures on big game hunting, after the annual banquet.

P. P. P.

**WESTERN PENNSYLVANIA**

The banquet meeting of the Western Pennsylvania Nurserymen's Association was held December 8, at Pittsburgh, and the following officers were elected for the coming year: President, M. W. Hinn, Sewickley; vice-president, Sylvester Curto, Pittsburgh; secretary, L. E. Wissenbach, Squirrel Hill Nursery, Pittsburgh; treasurer, Charles Zimmerman, I. W. Scott Co., Pittsburgh; director, Burt Smith, Freeland Nurseries, Bakers-town.

This meeting was well attended, with forty men present. The association meets regularly on the second Friday of each month.

**BETTER DESPITE WEATHER.**

Ending the year with a slight increase in sales over 1938, a leading eastern nurseryman comments: "We are well pleased with this because it is more than we expected, considering that 1939 produced the most unfavorable weather in many years. Hot dry spells discouraged sales from April on, and the fall season has been the driest since 1893, according to a recent newspaper report. The sales increase was in no way due to public works, etc., which we make it a point to ignore and avoid. We prefer to develop our business on the merits of our plants and our landscape department rather than upon competitive bidding."

J. PETERS, Millbrae, Cal., gave an illustrated talk on shrubs at a recent meeting of the San Carlos Civic Garden Club.

**PHLOX PLANTS**

We offer over forty leading varieties of Hardy Phlox. True to name, no mixtures. Prices are right. Let us mail you complete list.

We also grow a complete line of Lining-out Evergreens, Specimen Evergreens, Shade Trees, Shrubs and Perennials. Write for special quotations on quantity orders.

**SHERMAN NURSERY COMPANY**

"55 Years—Still Growing"

Charles City, Ia.

**Boyd**  
NURSERY COMPANY

McMinnville  
Tenn.

General line of Hardy Shrubs and Forest and Shade Tree Seedlings, specializing in lining-out stock.

Amor River North Privet  
Red Bark Dogwood Witch Hazel  
Cercis Canadensis, Redbud  
Cornus Florida, White Dogwood  
Black Walnut and Sweet Gum

Write for our wholesale price list.

**JEWELL SPECIALS**

Bleeding Hearts, Large-flowering Clematis, Bolleana Poplar, Gypsophila Bristol Fairy, Evergreen Liners, Persian Lilacs and Hard Maple.

A complete line of fruits, trees and shrubs. Write for price list.

**THE JEWELL NURSERY CO.**

Pouch A

Lake City, Minn.

**PEACH PITS**

Our Pits Compare Favorably  
With the Best

**HOGANSVILLE NURSERIES**  
HOGANSVILLE, GEORGIA

We offer general line of

**FRUIT TREES**

Heavy on Apple and Peach. Can furnish by carload. Send us your want list. Write for prices.

**COMMERCIAL NURSERY CO.**

Decherd, Tenn.

**WILLIS NURSERY CO.**

Wholesale Nurserymen

Fall price list ready now.

Complete assortment. Low prices.

OTTAWA - - KANSAS

3,000 Weigelia EVA RATHKE, 2-yr., 6c to 15c  
25,000 Weigelia EVA RATHKE, 1-yr., 5c to 10c  
2,500 Juniperus Pfitzeriana, 2-in. pots, 12½c  
4,000 Juniperus Pfitzeriana, 2-in. pots, 10c  
1,000 Hydrangea P. G., 2-yr., 6c to 7½c

**Humphreys Landscape Service**  
Mt. Sterling, Ky.



# Wage-Hour Hearing

*Lester C. Lovett among Witnesses at Washington  
for Shippers of Christmas Trees and Decorations*

A public hearing at Washington, D. C., November 29 to consider seasonal exemptions under the wage-hour act for shippers of Christmas trees and decorations found almost total absence of pressure on the part of the trade to obtain the relief sought.

Three witnesses appearing in person and several firms submitting written argument made up the entire representation—to the admitted surprise of wage-hour administration officials. The hearing lasted less than two hours.

Appearing in behalf of the decorative greens branch of the industry, Simon H. Casper and Jerome Bennett, of the Rice-Bayersdorfer Co., Philadelphia, and Lester C. Lovett, Selbyville, Del., urged approval of the exemption application contending that, because of seasonal characteristics peculiar to their operations, section 526.3 of the wage-and-hour regulations should be invoked. The exemption sought permits any industry found to be of a seasonal nature to employ workers up to twelve hours a day or fifty-six hours a week (without payment of overtime) for not more than fourteen work weeks in any calendar year.

Messrs. Casper and Bennett outlined operations of the Philadelphia firm, a large producer of Christmas wreaths manufactured for the most part from imported materials, explaining that imported ruscus, lycopodium, statice, thistle and peppergrass cannot be harvested abroad until June or July and that the materials are not available for process in this country until October. The witnesses requested an exemption beginning October 15 and continuing until processing is completed early in December, when Christmas shipments are begun.

Discussing operations at his Selbyville, Del., establishment, Mr. Lovett said the peak season is October 1 to December 10. Approximately \$35,000 is paid annually to local farmers who supply wreaths of native holly for processing. Wreaths are not purchased from farmers, he explained, unless the foliage has attained full size and unless there has been at

least one frost period. Delivery of the wreaths to the firm within forty-eight hours after the foliage is cut is demanded of the growers.

Halvorson Trees, Inc., Duluth, Minn., a leading supplier of spruce trees for the Christmas season and an applicant for exemption, was not represented at the hearing, but furnished officials with a brief outlining company operating characteristics.

Claiming to handle approximately 300,000 trees in an ordinary season and employing an average of forty-five men during the peak period, the company urged that the exemption be granted to cover the 14-week period. It was pointed out that the durability of the spruce tree after cutting is approximately three months, that the trees have no value except during the Christmas season and that the trees must therefore be cut and processed within a few

months preceding Christmas. Cutting begins about September 1, which is the end of the spruce budding season, and processed trees must be shipped before December 1.

Because of the limited information supplied at the hearing, Burton Seely, exemptions examiner, agreed to incorporate in the record all correspondence received by the wage-and-hour division on the subject of exemptions for the handlers of greens since the law became effective.

The official stated that several letters and correspondence in the division's files, received from the Bradbury Co., Boston, Mass.; the Northwest Evergreen Co., Bremerton, Wash., and the American Decorative Flower Co., Baltimore, Md., contain information on industry practices which will be considered. An early decision may be expected, although officials said they have little of the information which the notice of the hearing pointed out was desirable.

## PORTLAND WHOLESALE NURSERY CO.

306 S. E. 12th Avenue

PORTLAND

OREGON

*We can recommend  
very highly our*

## HEAVY GRADE FRUIT TREES

2 AND 3-YEAR

CAREFULLY SELECTED

VERY REASONABLE PRICES

An excellent item on which to make good money in the sales yard.

WRITE US FOR PRICES  
AND FOR OUR CATALOGUE IF YOU DO NOT  
HAVE IT ON HAND.

*A General Line of  
NURSERY STOCK*

Oregon-Grown - Quality Guaranteed

### MAHONIA AQUIFOLIUM

(Oregon Holly Grape) 1-yr.

	Per 1000
4 to 6 inches.....	\$12.75
2 to 4 inches.....	10.25
2 inches.....	7.75
1 to 2 inches.....	5.25

Order at least 2 grades on above.

### MAZZARD CHERRY

	Per 1000
2/16-in. to 3/16-in. ....	\$8.25
2/16-in. and just below.....	5.25

Thrifty, well rooted plants, no boxing charge.  
Shipment by freight or express.  
Lots of 10,000 and up, 60 days with acceptable references.  
Less lots. 1/4 C.O.D. or cash with shipping order. 30 years' experience in growing and fair dealing.

WALDO HILLS SEEDLING NURSERY  
Aumsville, Oregon

### PACIFIC COAST NURSERY

2244 N. Skidmore Court  
Portland, Oregon

We can furnish any variety of Fruit Tree seedlings in all grades, Chinese Elm seedlings and transplanted Elms, Cut-Leaf and White Birch trees, Norway Maple whips and Italian Prunes. We can benefit you with quality stock as well as prices. Samples upon request.

Field-Grown  
Rosebushes

HOWARD ROSE CO.  
Hemet, California



**Remember**

We are paying shipping costs on lining-out stock to any point in the United States and Canada when 50% of purchase price accompanies order. No packing charge.

*Write for Wholesale List*

**SHERWOOD NURSERY CO.**

*Evergreens  
Propagators & Growers*

141 S. E. 65th Avenue PORTLAND, ORE.

## FRUIT and SHADE TREE SEEDLINGS

Oregon and Washington Grown

Apple, Pear, Mahaleb, Mazzard,  
Myrobalan

Quince (rooted cuttings)

Chinese Elm Seedlings

Complete Line General Nursery Stock.

Chinese Elm, Transplanted Specimens.

Norway Maple, Lining-out Whips.

Send list of your wants for prices.

New catalogue now ready.

Combination carloads to eastern distributing points.

**MILTON NURSERY CO.**

A. Miller & Sons, Inc.

Since 1878

Milton, Oregon

## HARDY, NON-IRRIGATED ROSEBUSHES

and

FULL LINE OF

**EVERGREEN-SHRUBS**

**MOUNTAIN VIEW**

**FLORAL NURSERIES**

Troutdale, Oregon

Leading Growers since 1900.

## Perfection Currants Fruit Tree Seedlings

Let us quote on your needs

**DENISON & BLAIR**

Troutdale

Oregon

## APPLE SEEDLINGS CHINESE ELM SEEDLINGS

Yakima Valley grown.

ALSO MAZZARD, MAHALEB AND  
MYROBALAN SEEDLINGS.

**WASHINGTON NURSERIES**

Toppenish, Wash.

## PORTLAND NOTES.

The Portland Nursery Club, which meets for dinner at 6:45 p. m. on the second Wednesday of each month, followed by a short business meeting and general discussion, welcomes members of the trade as visitors when in Portland, Ore. The officers, elected in September, are: President, J. E. French; vice-president, A. M. Doerner; secretary-treasurer, Samuel J. Rich.

The local nurserymen are busy digging and shipping stock to California and western points, and it is of exceptional quality this year. Peterson & Dering packaged roses are on the local market now.

George Teufel is busy with his eastern holly trade.

Fred Borsch states that even though foreign countries are closed to shipments, sales by his firm have not materially decreased.

J. E. French.

## RODENT POISON BAIT.

The poison bait for field mice prepared according to the formula of the Minnesota biological survey and referred to a year ago as being eminently desirable for nursery use is being handled this year by the Minnesota State Horticultural Society. Regulations for its use are similar to those of last year. A permit must be secured from the department of conservation, while payment before delivery is insisted upon. As the permit involves little inconvenience, Minnesota nurserymen who have to contend with field mice, and they are fairly numerous this year, may wish to avail themselves of the opportunity to secure the bait, of which the district agent of the survey says one pound is sufficient for an acre of ground.

## PLANT PATENTS.

The following new plant patent was issued in November, according to information received from Rummeler, Rummeler & Davis, Chicago patent lawyers:

No. 348. Rose. Roy L. Byrum, Richmond, Ind., assignor to Joseph H. Hill Co., Richmond, Ind. A new and distinct variety of white hybrid tea rose, characterized as to novelty by its vigorous growth, good petal texture, bud form, large flowers, strong stems, large foliage and superior quality for forcing.

## A. MCGILL & SON

FAIRVIEW, OREGON

*Wholesale Only*

## GOOD WESTERN-GROWN NURSERY STOCK

**Fruit Tree Seedlings**

**Flowering Ornamental Trees**

**Shade Trees**

**Roses**

Grown right and packed right.

Combination carloads to Eastern distributing points will save you on freight.

## We are now booking orders for

Vine Maple Seedlings.

Norway Maple, Whips and Seedlings.

White Birch, Trees and Seedlings.

Cutleaf Birch.

Pacific Dogwood Seedlings.

Mountain Ash, Trees and Seedlings.

Chinese Elm, Trees and Seedlings.

Catalogue mailed on request.

**DOTY & DOERNER, INC.**

Route 6, Box 92

Portland, Oregon

## OREGON'S BEST SOURCE OF GOOD ROSES

is

**PETERSON & DERING, INC.**

*Wholesale Rose Growers*

Scappoose, Oregon

**Write for List**

## ROSEBUSHES

200 Varieties

"Hi-Land Grown-They're Hardy" Send for Trade List

**PACIFIC NORTHWEST ROSE NURSERY**

Box 261 Wholesale Only Gresham, Ore.

## ORENCO NURSERY CO.

Orengo, Oregon

**WHOLESALE GROWERS**

Fruit, Shade, Flowering Ornamental  
Trees, Fruit-tree Seedlings, Roses, Etc.

*Very complete line of quality stock*

Catalogue sent on request.

## FROM KANSAS SCHOOL.

### Increasing Sales.

High lights from the third annual school for nurserymen, held at Kansas State College, reported in the preceding issue, are contained in the following brief summaries of some of the talks:

Harry Bouck, secretary of the Manhattan chamber of commerce, recommended, for increasing nursery sales, that the nurseryman, when a person builds in his city, go to him with plans for landscaping, presenting him with several plans at different costs. "Give him a time payment plan," said Mr. Bouck, "for all other businesses have such a plan. Give him a plan which will not require any worry on his part and carry it through with that very thing in mind."

### Damping-off.

Dr. Ernest Wright, forest pathologist of the federal bureau of plant industry, recommended that damping-off could be prevented to a certain extent by (1) depth of planting, (2) increasing aeration by using screen wire sides around the propagating bed and not overwatering, (3) rotation of crops, adjusting the acidity of the soil by using ferrous sulphate, aluminum sulphate or sulphuric acid, (4) seed treatment and (5) spraying plants as soon after emergence as possible.

He made the following generalizations:

1. Before treatment, be sure you know definitely the cause. Be sure the loss of your plants is caused by the disease, damping-off.
2. It is always advisable to call a plant pathologist before treating plants.
3. In all cases it is best to try out a treatment on a small scale with control or check plots.
4. The conditions for one nursery are different from another.

### Irrigation.

Ralph Ricklefs, of the Kansas Landscape & Nursery Co., Salina, said that it is essential to keep the cost of irrigation down to a minimum, since one does not need the system every year or throughout the entire growing season. Mr. Ricklefs mounts a centrifugal pump on a raft which is placed on the river. Mount-

ing the pump on a raft helps to keep it from being flooded. He waters nursery stock by the flood method, and the response is sufficient to net a profit. Mr. Ricklefs thinks that it is best to water the seedbed with the overhead system.

### Emulsified Nursery Wax.

Dr. George A. Filing, associate professor of pomology of Kansas State College, pointed out that among the benefits claimed for nursery wax were better survival, reduction of molds when the nursery stock is stored, insecticidal value, better rooting and cuttings, reduced sunscald and increased winter hardiness.

E. Eugene Saunders.

## RESOLUTION OPPOSES GOVERNMENT NURSERIES.

At its meeting last month, the Association of Kansas Nurserymen expressed the members' opposition to the expanding government nurseries by formulating and adopting a resolution, which is given in full here in case other organizations may wish to use it as a model in passing similar resolutions:

The introduction into and the continually expanding activities of governmental agencies in the field of nursery stock production constitutes a very definite and real threat to the future of the nursery industry of the United States and of the state of Kansas.

Therefore, be it resolved by the Association of Kansas Nurserymen in annual session assembled on this the twenty-third day

of November, 1939, that we register with our representatives and senators in the United States Congress our protests against the continuation of appropriations of public funds for such purposes, except for the growing of such nursery stock as may be desirable for scientific, educational and experimental purposes and forest tree seedlings to be used for afforestation plantings on the public domain.

Nurserymen, by the very nature of their occupation, are conservationists and heartily approve the efforts of governmental agencies in the conservation of our soils and our natural resources; however, we also feel that governmental funds, either federal, state or local raised by taxes, in part from the nursery trade, should not be used to establish or maintain governmental units in direct competition with this established branch of agriculture.

Assembled data shows that the legitimate nursery industry is able to produce many times the number of trees and shrubs of acceptable species and grades required for all the state and federal agencies at a price far below the present actual cost of government grown trees and shrubs. It would be a conservation of public funds for the governmental agencies needing nursery stock to contract for such needs from the commercial nurserymen of the country.

The nursery industry (a branch of agriculture) is established throughout the country and represents a total investment, including lands, buildings and equipment, of more than \$60,000,000, and employs the year around 20,000 skilled and semi-skilled laborers and 25,000 additional employees during the spring and fall peak periods of activity, and pays in taxes approximately \$1,000,000 per annum in support of local, state and federal governments.\*

The government owned and operated nurseries are not growing a single species of tree or shrub that cannot be grown by commercial nurseries in any desired number and of equal quality and in the same length of time required for their production in government nurseries.

The commercial nurserymen of Kansas

\*See report adopted by the American Association of Nurserymen at Portland, Ore., July 14, 1939.

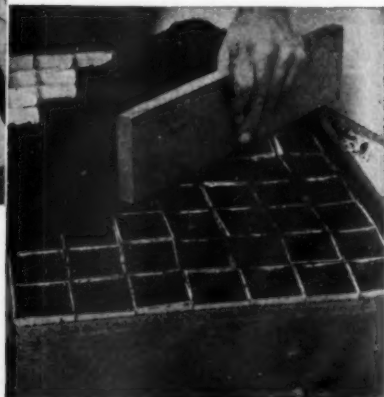


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INC.  
WEST CHICAGO  
ILLINOIS

"FLOWER SEEDS FOR NURSERYMEN"  
Send for Catalogue

## The New Plant Bands

Inexpensive wood plant bands instead of pots for growing on perennials. Six sizes. Better write for samples and prices.





### **Berberis Thunbergii atropurpurea**—

seed of the true Purple Leaf Barberry, collected from a large carefully tended block. No cross-pollination from green stock. Dry berries, \$5.00 lb.; 10 lbs., \$45.00. Prices for large quantities upon request.

**Malus baccata**—Siberian Crab, \$2.50 lb. for dry pomes. Varieties:  
Red-fruited,  
Yellow-fruited Peking variety,  
Mandshurica.

**Malus thieifera**—Chinese Tea Crab. Dry pomes, \$2.50 lb.

Ask for our general catalogue listing 1,728 trees, shrubs, perennials and seed items.

**F. W. SCHUMACHER.** *Horticulturist*  
Jamaica Plain, Boston, Mass.

**North Dakota and Montana Seeds**  
**JUNIPERUS SCOPULORUM**  
Shepherdia argentea, Viburnum Lentago, Fraxinus lanceolata and other seeds. Native plants.

**E. C. MORAN**  
Medora, N. D.

We are collectors of  
**NORTHERN MINNESOTA TREE SEEDS**  
including  
Pinus Banksiana, Jack Pine  
Pinus Strobus, White Pine  
Pinus Resinosa, Red Pine  
Pinus Canadensis, White Spruce  
Write for prices.  
**Bear Creek Evergreen Nursery**  
Shewin, Minnesota

**PEONIES**  
All types, including Tree Peonies  
**The Cottage Gardens**  
Lansing, Mich.

**QUALITY PERENNIAL PLANTS**  
Specialties  
Gypsophila Bristol Fairy and Dicentra Spectabilis.  
Let us quote on your perennial needs.  
**PERENNIAL NURSERIES** Painesville, O.  
Alva H. Smith R.F.D. 2

**NURSEYMEN ATTENTION NURSEYMEN**  
HEAVY FIELD PLANTS NOW READY  
THE FAMOUS HARDY CUSHION MUMS.  
ALL COLORS. 10¢ EACH.  
SEND FOR CHRYSANTHEMUM CATALOGUE.  
**WONDERLAND NURSERIES,** Ellersoon, Va.

**HERBS**  
Pot-grown plants: over a hundred varieties.  
Dried Herbs for Flavoring and Fragrance.  
Other plants of unusual character and with the charm of old-time gardens.  
New Catalogue sent on receipt of 10 cents.  
**WEATHERED OAK HERB FARM, INC.**  
Bradley Hills, Bethesda, Maryland

**TREE and SHRUB SEEDS**  
Juniperus Virginiana Seeds  
American Plum Pits  
Corylus Americana Nuts  
All new crop. Northeastern Iowa source.  
Write for prices.  
**SCOTCH GROVE NURSERY**  
Scotch Grove, Iowa.

will welcome an opportunity to contract with the federal government for the production and delivery of such species of nursery stock as the government agencies may need, in such quantities and grades as may be specified.

### **SOUTHWESTERN NEWS.**

Mrs. J. P. Serafino, 2919 Rosewood, Houston, Tex., is starting a small nursery.

The Minnequa Nursery is the name of a new enterprise which is being operated at Pueblo, Colo., by Mrs. M. F. Savage.

Ramsey's Austin Nursery moved the last of November into a fine new office and warehouse on the main Austin-Dallas highway, at Austin, Tex.

L. H. Burton is starting a nursery at Eureka, Kan.

J. C. Muecke is putting in a nursery sales yard at Humboldt, Kan., on the Mount Hope cemetery road.

The Sutton Nurseries, Independence, Kan., were low bidders on two roadside improvement projects in Neosho and Labette counties, Kan. They will be planted in the spring of 1940.

L. W. Lawson, McPherson, Kan., was awarded the contract for landscaping the new federal building at Kansas City, Mo.

December 10 marked the opening of the new store and conservatory of the Clovis Floral Co., Clovis, N. M. In addition to its florists' business, this firm has an extensive trade in nursery stock.

The Association of Kansas Landscape Architects is sponsoring the establishment of a Kansas arboretum. One of the sites being considered is a 600-acre farm situated within a few miles of Lawrence belonging to the University of Kansas. This farm was the property of Charles Robinson, the first governor of Kansas, and was willed by him to the university.

The Kansas Landscape & Nursery Co., Salina, Kan., has given nursery stock valued at more than \$2,500 to the Kansas forestry, fish and game commission. N. Y. A. labor is being used to plant the stock at the Ottawa county state lake. It is expected that the work will take most of the winter.

RHEA F. ELLIOTT, of the Elliott Nursery Co., Evans City, Pa., was the guest speaker at a dinner meeting of the Aliquippa Rotary Club, November 27.

### **BERBERIS THUNBERGII ATROPURPUREA**

**Red-Leaved  
Japanese Barberry**

Sturdy, two-year-old seedlings

	Per 100	Per 1000
9 to 12 inches.....	\$3.50	\$30.00
12 to 15 inches.....	4.50	40.00
15 to 18 inches.....	5.50	50.00

Prices on larger quantities will be furnished on application.

**HENRY A. DREER, Inc.**  
1306 Spring Garden Street  
Philadelphia, Pa.

### **CARLOAD LOTS**

**ELM**, American, Moline and Vase, up to 4 ins. All transplants.

**MAPLE**, Norway, up to 3½ ins. Transplants, extra select, spaced 7x7 ft.

**POPLAR**, Lombardy, up to 2 ins.

**WILLOWS**, Thurlow, up to 3 ins.

**BARBERRY**, Thunbergii, up to 2 to 3 ft.

**SPIRÆA**, Vanhouttei, up to 5 to 6 ft.

**APPLE**, 2-year.

**CHERRY**, 1-year.

**PEACH.**

All of above items can be supplied in carload lots.

Send for list on many other items.

**C. M. HOBBS & SONS, INC.**  
Bridgeport, Indiana

Largest Nursery in Indiana. Est. 1875.

### **Apple and Peach Trees In Carload Lots**

A long variety list to select from. We also can offer other Fruit Trees in carload lots, as well as Tennessee Natural Peach Seeds.

If you are interested in either Fruit Trees or Peach Seeds, send us your want lists and we will quote attractive prices.

**SOUTHERN NURSERY CO.**  
Winchester, Tenn.

for  
**Successful Lawns**  
Make sure of seed that brings you results—by taking advantage of Woodruff service. Write for details.  
F. H. Woodruff & Sons, Inc., Milford, Conn.

**WOODRUFF LawnSeed**

## PLATE BOOKS for Nurserymen

**Book A.** Illustrates in full color 235 standard nursery items, brief description, substantially bound. Price in small lots, 65c each.

**Book B.** Condensed edition, 120 items illustrated in full color. Price in small lots, 30c each.

### Descriptive Nursery Catalogue

Nicely illustrated, 48 pages and cover. 17c each in small lots.

Will send sample copy of each on receipt of \$1.00. Cash with order.

**A. B. MORSE COMPANY**  
St. Joseph, Michigan



**PITTS ELECTRO SERVICE**  
for Seed and Nursery Catalogues. Black and white - four color. Write for catalogue.  
**THE PITTS STUDIOS**  
411 Genesee St.  
Rochester, N. Y.

## PLATE BOOKS

Help your sales talk with our attractive picture outfits.

Send for catalogue.

**B. F. CONIGISKY**  
211 Hamilton St. Peoria, Ill.

## ARIENS-Tiller



The American  
**TILLAGE COMBINE**  
**3 MODELS EVERY NEED**  
**ARIENS CO.**  
Box 710 Brillion, Wis.

## SITUATION WANTED

Forester with B.S. and M.S. degree, major in botany, minor in soil fertility and fertilizers, would like opportunity with reliable firm. One and one-half years' experience. Salary not a factor. Address No. 147, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

## HELP WANTED

Salesman to call on trade for large midwestern wholesale nursery; must be able to produce; excellent opportunity for the right man.

Address No. 146, c/o American Nurseryman, 508 S. Dearborn St., Chicago, Ill.

## CLASSIFIED ADVERTISING

Peonies: Tree and Herbaceous, best varieties. Oberlin Peony Gardens, Sinking Spring, Pa.

**RED CEDAR, TRUE PLATTE RIVER TYPE.**  
Open field-grown. Per 100 Per 1000  
Transplants, 4 to 6 ins. .... \$4.75 \$45.00  
Transplants, 6 to 8 ins. .... 6.50 60.00  
Transplants, 8 to 10 ins. .... 7.50 70.00  
Transplants, 10 to 12 ins. .... 9.50 90.00  
Transplants, 12 to 18 ins. .... 11.50 110.00  
Seedlings, from beds, 4 to 6 ins. .... 3.25 30.00  
Shipped prepaid. Cash, please.  
**PRITCHARD NURSERIES, OTTAWA, KAN.**

## STRAWBERRY OUTLOOK.

Estimates indicate about 197,000 acres of strawberries for picking in 1940. The indicated acreage is the largest since 1929, and nine per cent above the 1928-37 average, but it is only about two per cent larger than the 1939 harvested acreage. Should yields in 1940 be average, production would be somewhat less than in 1939, when the per acre yield was about ten per cent above average. Higher consumer incomes in 1940 probably will result in a better demand for strawberries than existed in 1939, according to the federal bureau of agricultural economics.

Increases in 1940 over 1939 acreages are indicated in the late and intermediate states. In the second early and the early states some decrease in acreage is expected.

During the past decade acreage has increased markedly in the late states and in 1940 is expected to be the largest on record. The upward trend in acreage in the intermediate states is expected to continue in 1940. In the early states acreage has declined somewhat, while in the second early states there has been no pronounced acreage trend in recent years.

## NEW HEDGE SHEAR.

An entirely new development in hedge shear design has been announced by Seymour Smith & Son, Inc., maker of fine pruning tools, hedge and grass shears for more than seventy years.

This important advancement is the "Multi-Power," a hedge shear employing the use of a patented compound lever cutting action. This lever construction steps up power from handles to blades sixty per cent. At the same time the action is a smooth, effortless open-and-shut motion, as compared to the slam-bang, jarring, tiring motion necessary with the ordinary type of hedge shears.

The "Multi-Power" has scientifically tempered, carefully honed thin blades, that do not need serrated edges to hold the branch firmly. It is finished in attractive black and orange color combination with polished, hardwood maple handles.

The company also announces an important new improvement on the already famous "Snap-Cut" pruner.

The efficient soft metal cutting anvil has been replaced by a more efficient, long-lasting genuine bronze

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anvil. This new cutting construction will entirely eliminate any dulling of the blade at the completion of its cut through the wood. The bronze anvil will entirely absorb the



Announce New Hedge Shears.

impact of the blade and ensure even a cleaner, freer slicing stroke.

This new bronze anvil will be applied for the time being only to "Snap-Cut" model No. 119.

#### CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in the American Nurseryman.]

Orenco Nursery Co., Orenco, Ore.—Wholesale price list of fifty-six pages and cover, 6x9 inches, carries full line of fruit and nut trees, small fruits, shade trees, deciduous shrubs, coniferous and broad-leaved evergreens, vines, roses and peonies.

Levick Nursery Co., Bridgeton, N. J.—Wholesale price list of rhododendrons and azaleas, twelve pages and cover, 4x9 inches.

W. B. Clarke & Co., San Jose, Cal.—Wholesale price list dated November 15, 1939, for autumn and spring season, of thirty-two pages, 4x9 inches, including conifers, broad-leaved evergreens and flowering fruit trees and deciduous shrubs, featuring a number of new and rare items imported from Europe or from the firm's breeding.

Benton County Nursery Co., Rogers, Ark.—Retail catalogue of thirty-two pages with covers printed in colors, 8x10 1/2 inches, about half devoted to fruits and half to ornamental plants.

THE Phillip H. Burrows Co., Tacoma, Wash., has opened a sales yard at 3801 Sixth avenue.

#### EMPIRE GROWN

Extra-fine Haleshaven June Bud Peach trees, 2 to 3 ft. and 3 to 4 ft. Heavy branched, 1/4-in. to 1/2-in.  
Pink Grape Myrtle liners. Also in finished stock.

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### Holiday Greetings

*As the year reaches its end and we review the problems and changes that have faced all of us, we send you our sincere wishes for Happy Holidays, and increased prosperity for 1940.*

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Direct Mail

Catalogues  
Booklets  
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#### Nursery and Florist SPHAGNUM MOSS

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**THE MOSS CO. Mather, Wis.**



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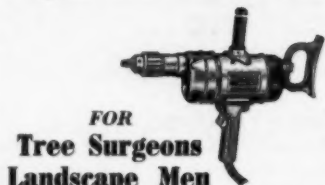
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